

## FIGURE 1

REMARK Form 7. Coordinates for the crystal structure of a fully active  
 REMARK construct of human topoisomerase I (topo70) and 22mer duplex DNA.  
 REMARK  
 REMARK coordinates from twinned data simulated annealing refinement  
 REMARK twinning operator= h,-h-k,-l twinning fraction= 0.150  
 REMARK refinement resolution: 500.0 - 3.20 Å  
 REMARK starting twinned r= 0.2223 twinned free\_r= 0.2818  
 REMARK final twinned r= 0.2166 twinned free\_r= 0.2843  
 REMARK rmsd bonds= 0.008754 rmsd angles= 1.36116  
 REMARK wa\_initial= 550135 wa\_dynamics= 544016 wa\_final= 581075  
 REMARK target= twin\_lsq md-method= torsion annealing schedule= slowcool  
 REMARK starting temperature= 2500 total md steps= 100 \* 6  
 REMARK sg= P3(2) a= 73.235 b= 73.235 c= 186.632 alpha= 90 beta= 90 gamma= 120  
 REMARK parameter file 1 : protein.param  
 REMARK parameter file 2 : dna-rna.param  
 REMARK molecular structure file: f7\_gen\_2.mtf  
 REMARK input coordinates: f7\_gen\_2.pdb  
 REMARK reflection file= topof7c\_fr5twin.cv  
 REMARK ncs= none  
 REMARK B-correction resolution: 6.0 - 3.20  
 REMARK initial B-factor correction applied to fobs :  
 REMARK B11= 21.290 B22= 21.290 B33= -42.580  
 REMARK B12= 10.599 B13= 0.000 B23= 0.000  
 REMARK B-factor correction applied to coordinate array B: -0.870  
 REMARK bulk solvent: (Babinet) density level= 0.8 e/Å<sup>3</sup>, B-factor= 280 Å<sup>2</sup>  
 REMARK reflections with |Fobs|/sigma\_F < 0.0 rejected  
 REMARK reflections with |Fobs| > 10000 \* rms(Fobs) rejected  
 REMARK reflections with |Fobs|[h,-h-k,-l] = 0 rejected  
 REMARK theoretical total number of refl. in resol. range: 18471 ( 100.0 % )  
 REMARK number of unobserved reflections (no entry or |F|=0): 601 ( 3.3 % )  
 REMARK number of reflections rejected: 399 ( 2.2 % )  
 REMARK total number of reflections used: 17471 ( 94.6 % )  
 REMARK number of reflections in working set: 15910 ( 86.1 % )  
 REMARK number of reflections in test set: 1561 ( 8.5 % )  
 REMARK FILENAME="f7\_fit2\_ann\_1.pdb"  
 REMARK DATE:Aug-09-2001 16:26:07 created by user: craig  
 REMARK Written by CNX VERSION:2000.12

ATOM	1	CB	ALA	201	88.157	1.438	-29.769	1.00	61.21	A	C
ATOM	2	C	ALA	201	90.370	1.483	-30.977	1.00	60.87	A	C
ATOM	3	O	ALA	201	90.356	1.938	-32.134	1.00	60.57	A	O
ATOM	4	N	ALA	201	89.739	-0.474	-29.541	1.00	61.64	A	N
ATOM	5	CA	ALA	201	89.233	0.588	-30.469	1.00	61.37	A	C
ATOM	6	N	ALA	202	91.357	1.713	-30.109	1.00	59.80	A	N
ATOM	7	CA	ALA	202	92.504	2.560	-30.427	1.00	58.58	A	C
ATOM	8	CB	ALA	202	93.222	2.039	-31.679	1.00	58.81	A	C
ATOM	9	C	ALA	202	92.051	4.015	-30.620	1.00	57.67	A	C
ATOM	10	O	ALA	202	92.764	4.829	-31.216	1.00	58.23	A	O
ATOM	11	N	TRP	203	90.862	4.329	-30.105	1.00	55.35	A	N
ATOM	12	CA	TRP	203	90.284	5.671	-30.202	1.00	52.66	A	C
ATOM	13	CB	TRP	203	88.764	5.584	-30.016	1.00	52.75	A	C
ATOM	14	CG	TRP	203	88.042	6.909	-29.993	1.00	51.66	A	C
ATOM	15	CD2	TRP	203	88.310	8.055	-30.809	1.00	50.36	A	C
ATOM	16	CE2	TRP	203	87.345	9.035	-30.483	1.00	50.26	A	C
ATOM	17	CE3	TRP	203	89.267	8.349	-31.784	1.00	49.63	A	C
ATOM	18	CD1	TRP	203	86.961	7.235	-29.220	1.00	51.95	A	C
ATOM	19	NE1	TRP	203	86.535	8.510	-29.512	1.00	51.21	A	N
ATOM	20	CZ2	TRP	203	87.310	10.282	-31.101	1.00	49.11	A	C

ATOM	21	CZ3	TRP	203	89.231	9.585	-32.394	1.00	49.21	A	C
ATOM	22	CH2	TRP	203	88.257	10.537	-32.050	1.00	49.21	A	C
ATOM	23	C	TRP	203	90.895	6.613	-29.155	1.00	51.41	A	C
ATOM	24	O	TRP	203	91.049	6.237	-27.985	1.00	51.54	A	O
ATOM	25	N	LYS	204	91.241	7.832	-29.571	1.00	48.76	A	N
ATOM	26	CA	LYS	204	91.842	8.790	-28.647	1.00	45.42	A	C
ATOM	27	CB	LYS	204	93.291	9.078	-29.045	1.00	45.28	A	C
ATOM	28	CG	LYS	204	94.178	7.836	-28.944	1.00	44.77	A	C
ATOM	29	CD	LYS	204	95.660	8.169	-29.013	1.00	45.14	A	C
ATOM	30	CE	LYS	204	96.518	6.903	-28.994	1.00	44.98	A	C
ATOM	31	NZ	LYS	204	97.969	7.190	-29.197	1.00	45.77	A	N
ATOM	32	C	LYS	204	91.042	10.068	-28.469	1.00	43.32	A	C
ATOM	33	O	LYS	204	91.567	11.171	-28.585	1.00	42.33	A	O
ATOM	34	N	TRP	205	89.774	9.885	-28.115	1.00	41.75	A	N
ATOM	35	CA	TRP	205	88.824	10.976	-27.886	1.00	40.05	A	C
ATOM	36	CB	TRP	205	87.625	10.467	-27.088	1.00	38.86	A	C
ATOM	37	CG	TRP	205	87.993	9.774	-25.796	1.00	36.55	A	C
ATOM	38	CD2	TRP	205	88.101	10.373	-24.499	1.00	35.55	A	C
ATOM	39	CE2	TRP	205	88.414	9.343	-23.589	1.00	35.18	A	C
ATOM	40	CE3	TRP	205	87.954	11.678	-24.017	1.00	35.24	A	C
ATOM	41	CD1	TRP	205	88.245	8.443	-25.624	1.00	35.31	A	C
ATOM	42	NE1	TRP	205	88.498	8.177	-24.302	1.00	34.50	A	N
ATOM	43	CZ2	TRP	205	88.581	9.577	-22.216	1.00	35.93	A	C
ATOM	44	CZ3	TRP	205	88.120	11.911	-22.650	1.00	35.52	A	C
ATOM	45	CH2	TRP	205	88.429	10.864	-21.767	1.00	35.27	A	C
ATOM	46	C	TRP	205	89.402	12.189	-27.185	1.00	39.11	A	C
ATOM	47	O	TRP	205	88.968	13.315	-27.429	1.00	38.21	A	O
ATOM	48	N	TRP	206	90.337	11.950	-26.270	1.00	39.64	A	N
ATOM	49	CA	TRP	206	90.963	13.047	-25.554	1.00	40.16	A	C
ATOM	50	CB	TRP	206	91.743	12.550	-24.341	1.00	37.68	A	C
ATOM	51	CG	TRP	206	92.816	11.594	-24.667	1.00	35.66	A	C
ATOM	52	CD2	TRP	206	92.661	10.197	-24.922	1.00	34.70	A	C
ATOM	53	CE2	TRP	206	93.958	9.656	-25.092	1.00	34.62	A	C
ATOM	54	CE3	TRP	206	91.553	9.346	-25.015	1.00	33.45	A	C
ATOM	55	CD1	TRP	206	94.157	11.848	-24.710	1.00	35.34	A	C
ATOM	56	NE1	TRP	206	94.852	10.684	-24.958	1.00	34.81	A	N
ATOM	57	CZ2	TRP	206	94.175	8.301	-25.349	1.00	33.98	A	C
ATOM	58	CZ3	TRP	206	91.771	7.999	-25.270	1.00	33.31	A	C
ATOM	59	CH2	TRP	206	93.074	7.489	-25.433	1.00	33.17	A	C
ATOM	60	C	TRP	206	91.863	13.802	-26.523	1.00	41.05	A	C
ATOM	61	O	TRP	206	91.817	15.030	-26.572	1.00	41.72	A	O
ATOM	62	N	GLU	207	92.629	13.069	-27.331	1.00	42.35	A	N
ATOM	63	CA	GLU	207	93.500	13.689	-28.326	1.00	44.65	A	C
ATOM	64	CB	GLU	207	94.297	12.624	-29.100	1.00	45.71	A	C
ATOM	65	CG	GLU	207	95.571	12.117	-28.411	1.00	47.03	A	C
ATOM	66	CD	GLU	207	96.760	11.944	-29.385	1.00	48.31	A	C
ATOM	67	OE1	GLU	207	97.351	10.839	-29.428	1.00	48.70	A	O
ATOM	68	OE2	GLU	207	97.123	12.920	-30.092	1.00	48.28	A	O
ATOM	69	C	GLU	207	92.662	14.513	-29.316	1.00	46.25	A	C
ATOM	70	O	GLU	207	93.199	15.156	-30.221	1.00	46.31	A	O
ATOM	71	N	GLU	208	91.344	14.476	-29.146	1.00	48.51	A	N
ATOM	72	CA	GLU	208	90.430	15.209	-30.013	1.00	50.51	A	C
ATOM	73	CB	GLU	208	89.331	14.280	-30.535	1.00	50.90	A	C
ATOM	74	CG	GLU	208	89.703	12.791	-30.572	1.00	51.81	A	C
ATOM	75	CD	GLU	208	90.794	12.427	-31.588	1.00	52.57	A	C
ATOM	76	OE1	GLU	208	91.651	11.575	-31.249	1.00	52.28	A	O
ATOM	77	OE2	GLU	208	90.778	12.952	-32.731	1.00	52.39	A	O
ATOM	78	C	GLU	208	89.799	16.382	-29.261	1.00	51.90	A	C
ATOM	79	O	GLU	208	89.642	16.343	-28.034	1.00	52.07	A	O
ATOM	80	N	GLU	209	89.405	17.396	-30.027	1.00	53.42	A	N
ATOM	81	CA	GLU	209	88.787	18.639	-29.539	1.00	55.29	A	C
ATOM	82	CB	GLU	209	88.180	19.396	-30.734	1.00	56.96	A	C



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ATOM	83	CG	GLU	209	87.384	20.675	-30.418	1.00	59.26	A	C
ATOM	84	CD	GLU	209	88.230	21.835	-29.896	1.00	60.67	A	C
ATOM	85	OE1	GLU	209	87.626	22.784	-29.344	1.00	61.41	A	O
ATOM	86	OE2	GLU	209	89.477	21.811	-30.039	1.00	61.41	A	O
ATOM	87	C	GLU	209	87.758	18.533	-28.411	1.00	55.71	A	C
ATOM	88	O	GLU	209	87.094	17.511	-28.234	1.00	55.94	A	O
ATOM	89	N	ARG	210	87.617	19.635	-27.682	1.00	56.30	A	N
ATOM	90	CA	ARG	210	86.698	19.739	-26.559	1.00	56.90	A	C
ATOM	91	CB	ARG	210	87.194	20.808	-25.572	1.00	58.41	A	C
ATOM	92	CG	ARG	210	88.696	21.128	-25.634	1.00	58.88	A	C
ATOM	93	CD	ARG	210	88.986	22.205	-26.677	1.00	59.38	A	C
ATOM	94	NE	ARG	210	90.405	22.544	-26.792	1.00	60.09	A	N
ATOM	95	CZ	ARG	210	90.875	23.591	-27.471	1.00	60.53	A	C
ATOM	96	NH1	ARG	210	92.181	23.824	-27.518	1.00	60.94	A	N
ATOM	97	NH2	ARG	210	90.042	24.407	-28.108	1.00	60.88	A	N
ATOM	98	C	ARG	210	85.273	20.091	-26.991	1.00	56.59	A	C
ATOM	99	O	ARG	210	85.066	21.013	-27.787	1.00	55.91	A	O
ATOM	100	N	TYR	211	84.300	19.372	-26.430	1.00	56.85	A	N
ATOM	101	CA	TYR	211	82.883	19.603	-26.721	1.00	57.52	A	C
ATOM	102	CB	TYR	211	82.019	18.454	-26.194	1.00	58.75	A	C
ATOM	103	CG	TYR	211	81.384	17.645	-27.299	1.00	59.63	A	C
ATOM	104	CD1	TYR	211	80.286	18.140	-28.011	1.00	59.92	A	C
ATOM	105	CE1	TYR	211	79.745	17.438	-29.086	1.00	59.71	A	C
ATOM	106	CD2	TYR	211	81.921	16.416	-27.683	1.00	59.96	A	C
ATOM	107	CE2	TYR	211	81.387	15.704	-28.761	1.00	60.04	A	C
ATOM	108	CZ	TYR	211	80.305	16.222	-29.462	1.00	59.88	A	C
ATOM	109	OH	TYR	211	79.828	15.550	-30.567	1.00	59.87	A	O
ATOM	110	C	TYR	211	82.398	20.921	-26.125	1.00	56.93	A	C
ATOM	111	O	TYR	211	82.783	21.292	-25.019	1.00	57.32	A	O
ATOM	112	N	PRO	212	81.526	21.636	-26.853	1.00	56.51	A	N
ATOM	113	CD	PRO	212	81.126	21.299	-28.227	1.00	56.92	A	C
ATOM	114	CA	PRO	212	80.953	22.927	-26.460	1.00	55.45	A	C
ATOM	115	CB	PRO	212	80.221	23.378	-27.726	1.00	56.01	A	C
ATOM	116	CG	PRO	212	80.931	22.659	-28.823	1.00	56.90	A	C
ATOM	117	C	PRO	212	79.990	22.881	-25.296	1.00	54.11	A	C
ATOM	118	O	PRO	212	78.992	23.588	-25.312	1.00	53.44	A	O
ATOM	119	N	GLU	213	80.268	22.031	-24.313	1.00	53.61	A	N
ATOM	120	CA	GLU	213	79.424	21.904	-23.125	1.00	53.54	A	C
ATOM	121	CB	GLU	213	79.493	23.193	-22.281	1.00	54.71	A	C
ATOM	122	CG	GLU	213	78.143	23.880	-21.967	1.00	57.77	A	C
ATOM	123	CD	GLU	213	77.478	24.537	-23.189	1.00	59.84	A	C
ATOM	124	OE1	GLU	213	78.044	25.514	-23.735	1.00	60.89	A	O
ATOM	125	OE2	GLU	213	76.390	24.074	-23.609	1.00	60.48	A	O
ATOM	126	C	GLU	213	77.974	21.562	-23.451	1.00	52.87	A	C
ATOM	127	O	GLU	213	77.492	21.848	-24.549	1.00	52.45	A	O
ATOM	128	N	GLY	214	77.266	21.023	-22.459	1.00	51.99	A	N
ATOM	129	CA	GLY	214	75.867	20.665	-22.628	1.00	50.79	A	C
ATOM	130	C	GLY	214	75.670	19.627	-23.710	1.00	49.63	A	C
ATOM	131	O	GLY	214	75.015	18.603	-23.502	1.00	50.32	A	O
ATOM	132	N	ILE	215	76.208	19.939	-24.883	1.00	47.77	A	N
ATOM	133	CA	ILE	215	76.155	19.084	-26.048	1.00	46.11	A	C
ATOM	134	CB	ILE	215	76.635	19.846	-27.299	1.00	46.06	A	C
ATOM	135	CG2	ILE	215	77.988	20.491	-27.051	1.00	45.97	A	C
ATOM	136	CG1	ILE	215	76.696	18.897	-28.487	1.00	46.62	A	C
ATOM	137	CD1	ILE	215	75.398	18.203	-28.725	1.00	47.39	A	C
ATOM	138	C	ILE	215	77.015	17.844	-25.804	1.00	45.15	A	C
ATOM	139	O	ILE	215	78.215	17.938	-25.538	1.00	45.09	A	O
ATOM	140	N	LYS	216	76.375	16.684	-25.863	1.00	44.14	A	N
ATOM	141	CA	LYS	216	77.053	15.423	-25.628	1.00	43.26	A	C
ATOM	142	CB	LYS	216	76.094	14.442	-24.966	1.00	42.95	A	C
ATOM	143	CG	LYS	216	75.528	14.962	-23.676	1.00	43.50	A	C
ATOM	144	CD	LYS	216	76.658	15.232	-22.703	1.00	44.54	A	C

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ATOM	145	CE	LYS	216	76.198	16.027	-21.503	1.00	44.60	A	C
ATOM	146	NZ	LYS	216	77.300	16.148	-20.506	1.00	44.86	A	N
ATOM	147	C	LYS	216	77.577	14.820	-26.903	1.00	43.10	A	C
ATOM	148	O	LYS	216	78.616	14.167	-26.912	1.00	42.64	A	O
ATOM	149	N	TRP	217	76.843	15.038	-27.984	1.00	43.23	A	N
ATOM	150	CA	TRP	217	77.214	14.486	-29.272	1.00	43.31	A	C
ATOM	151	CB	TRP	217	77.017	12.973	-29.257	1.00	43.11	A	C
ATOM	152	CG	TRP	217	75.778	12.573	-28.519	1.00	43.83	A	C
ATOM	153	CD2	TRP	217	74.447	12.560	-29.026	1.00	43.71	A	C
ATOM	154	CE2	TRP	217	73.598	12.155	-27.965	1.00	43.34	A	C
ATOM	155	CE3	TRP	217	73.884	12.849	-30.273	1.00	44.21	A	C
ATOM	156	CD1	TRP	217	75.691	12.184	-27.210	1.00	44.33	A	C
ATOM	157	NE1	TRP	217	74.384	11.934	-26.869	1.00	43.08	A	N
ATOM	158	CZ2	TRP	217	72.224	12.033	-28.112	1.00	44.19	A	C
ATOM	159	CZ3	TRP	217	72.515	12.729	-30.423	1.00	45.88	A	C
ATOM	160	CH2	TRP	217	71.697	12.323	-29.343	1.00	45.94	A	C
ATOM	161	C	TRP	217	76.397	15.078	-30.392	1.00	43.17	A	C
ATOM	162	O	TRP	217	75.440	15.818	-30.171	1.00	42.29	A	O
ATOM	163	N	LYS	218	76.777	14.712	-31.606	1.00	43.63	A	N
ATOM	164	CA	LYS	218	76.100	15.170	-32.803	1.00	43.76	A	C
ATOM	165	CB	LYS	218	77.137	15.670	-33.809	1.00	45.03	A	C
ATOM	166	CG	LYS	218	76.552	16.446	-34.970	1.00	46.56	A	C
ATOM	167	CD	LYS	218	77.297	17.757	-35.180	1.00	48.13	A	C
ATOM	168	CE	LYS	218	77.187	18.671	-33.959	1.00	49.92	A	C
ATOM	169	NZ	LYS	218	75.772	19.012	-33.596	1.00	51.39	A	N
ATOM	170	C	LYS	218	75.291	14.003	-33.386	1.00	42.89	A	C
ATOM	171	O	LYS	218	74.133	14.170	-33.784	1.00	42.55	A	O
ATOM	172	N	PHE	219	75.888	12.813	-33.378	1.00	42.02	A	N
ATOM	173	CA	PHE	219	75.217	11.641	-33.911	1.00	41.70	A	C
ATOM	174	CB	PHE	219	75.914	11.157	-35.175	1.00	41.04	A	C
ATOM	175	CG	PHE	219	75.251	9.965	-35.788	1.00	40.96	A	C
ATOM	176	CD1	PHE	219	74.033	10.099	-36.444	1.00	40.46	A	C
ATOM	177	CD2	PHE	219	75.801	8.697	-35.652	1.00	40.82	A	C
ATOM	178	CE1	PHE	219	73.370	8.991	-36.949	1.00	39.99	A	C
ATOM	179	CE2	PHE	219	75.139	7.581	-36.156	1.00	40.45	A	C
ATOM	180	CZ	PHE	219	73.922	7.730	-36.804	1.00	39.84	A	C
ATOM	181	C	PHE	219	75.105	10.480	-32.934	1.00	41.73	A	C
ATOM	182	O	PHE	219	76.040	10.183	-32.205	1.00	42.12	A	O
ATOM	183	N	LEU	220	73.972	9.787	-32.981	1.00	41.21	A	N
ATOM	184	CA	LEU	220	73.725	8.647	-32.108	1.00	40.46	A	C
ATOM	185	CB	LEU	220	73.258	9.114	-30.735	1.00	40.17	A	C
ATOM	186	CG	LEU	220	72.767	7.997	-29.812	1.00	39.57	A	C
ATOM	187	CD1	LEU	220	73.865	6.938	-29.620	1.00	39.34	A	C
ATOM	188	CD2	LEU	220	72.330	8.601	-28.482	1.00	39.42	A	C
ATOM	189	C	LEU	220	72.690	7.693	-32.693	1.00	40.89	A	C
ATOM	190	O	LEU	220	71.539	8.074	-32.937	1.00	41.03	A	O
ATOM	191	N	GLU	221	73.086	6.431	-32.838	1.00	40.59	A	N
ATOM	192	CA	GLU	221	72.204	5.427	-33.396	1.00	39.92	A	C
ATOM	193	CB	GLU	221	72.542	5.217	-34.867	1.00	40.89	A	C
ATOM	194	CG	GLU	221	71.384	4.675	-35.668	1.00	44.33	A	C
ATOM	195	CD	GLU	221	71.723	4.465	-37.129	1.00	45.68	A	C
ATOM	196	OE1	GLU	221	71.510	5.402	-37.934	1.00	46.05	A	O
ATOM	197	OE2	GLU	221	72.192	3.356	-37.473	1.00	46.10	A	O
ATOM	198	C	GLU	221	72.353	4.125	-32.638	1.00	39.10	A	C
ATOM	199	O	GLU	221	73.453	3.593	-32.533	1.00	38.11	A	O
ATOM	200	N	HIS	222	71.237	3.617	-32.117	1.00	39.07	A	N
ATOM	201	CA	HIS	222	71.214	2.360	-31.353	1.00	39.35	A	C
ATOM	202	CB	HIS	222	71.262	2.644	-29.850	1.00	40.73	A	C
ATOM	203	CG	HIS	222	70.186	3.572	-29.375	1.00	43.09	A	C
ATOM	204	CD2	HIS	222	70.128	4.926	-29.336	1.00	44.07	A	C
ATOM	205	ND1	HIS	222	68.986	3.123	-28.865	1.00	44.36	A	N
ATOM	206	CE1	HIS	222	68.236	4.160	-28.530	1.00	44.40	A	C

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ATOM	207	NE2	HIS	222	68.905	5.266	-28.805	1.00	44.03	A	N
ATOM	208	C	HIS	222	69.985	1.501	-31.683	1.00	38.15	A	C
ATOM	209	O	HIS	222	68.950	2.020	-32.117	1.00	38.35	A	O
ATOM	210	N	LYS	223	70.091	0.196	-31.436	1.00	36.90	A	N
ATOM	211	CA	LYS	223	69.012	-0.746	-31.746	1.00	36.14	A	C
ATOM	212	CB	LYS	223	69.602	-2.108	-32.134	1.00	38.51	A	C
ATOM	213	CG	LYS	223	69.112	-2.679	-33.473	1.00	42.11	A	C
ATOM	214	CD	LYS	223	67.677	-3.283	-33.462	1.00	43.38	A	C
ATOM	215	CE	LYS	223	66.544	-2.234	-33.457	1.00	44.73	A	C
ATOM	216	NZ	LYS	223	66.636	-1.188	-34.529	1.00	44.69	A	N
ATOM	217	C	LYS	223	67.978	-0.946	-30.646	1.00	34.16	A	C
ATOM	218	O	LYS	223	67.341	-2.003	-30.554	1.00	34.43	A	O
ATOM	219	N	GLY	224	67.776	0.060	-29.816	1.00	31.63	A	N
ATOM	220	CA	GLY	224	66.801	-0.123	-28.764	1.00	29.13	A	C
ATOM	221	C	GLY	224	67.266	-1.144	-27.741	1.00	27.18	A	C
ATOM	222	O	GLY	224	68.401	-1.636	-27.804	1.00	26.57	A	O
ATOM	223	N	PRO	225	66.403	-1.477	-26.771	1.00	25.62	A	N
ATOM	224	CD	PRO	225	65.122	-0.796	-26.502	1.00	24.74	A	C
ATOM	225	CA	PRO	225	66.712	-2.437	-25.709	1.00	25.04	A	C
ATOM	226	CB	PRO	225	65.774	-2.002	-24.603	1.00	24.56	A	C
ATOM	227	CG	PRO	225	64.550	-1.607	-25.371	1.00	23.99	A	C
ATOM	228	C	PRO	225	66.494	-3.896	-26.047	1.00	25.09	A	C
ATOM	229	O	PRO	225	66.198	-4.258	-27.193	1.00	25.85	A	O
ATOM	230	N	VAL	226	66.648	-4.720	-25.016	1.00	24.69	A	N
ATOM	231	CA	VAL	226	66.479	-6.161	-25.107	1.00	24.66	A	C
ATOM	232	CB	VAL	226	67.835	-6.895	-24.953	1.00	24.14	A	C
ATOM	233	CG1	VAL	226	67.621	-8.398	-24.769	1.00	22.35	A	C
ATOM	234	CG2	VAL	226	68.716	-6.612	-26.174	1.00	23.64	A	C
ATOM	235	C	VAL	226	65.539	-6.539	-23.981	1.00	25.40	A	C
ATOM	236	O	VAL	226	65.964	-6.841	-22.861	1.00	25.53	A	O
ATOM	237	N	PHE	227	64.250	-6.462	-24.280	1.00	26.30	A	N
ATOM	238	CA	PHE	227	63.227	-6.779	-23.305	1.00	27.31	A	C
ATOM	239	CB	PHE	227	61.845	-6.689	-23.926	1.00	26.38	A	C
ATOM	240	CG	PHE	227	61.397	-5.284	-24.185	1.00	25.01	A	C
ATOM	241	CD1	PHE	227	60.289	-4.760	-23.514	1.00	25.37	A	C
ATOM	242	CD2	PHE	227	62.065	-4.488	-25.099	1.00	23.65	A	C
ATOM	243	CE1	PHE	227	59.851	-3.467	-23.750	1.00	24.23	A	C
ATOM	244	CE2	PHE	227	61.635	-3.193	-25.347	1.00	24.77	A	C
ATOM	245	CZ	PHE	227	60.522	-2.678	-24.670	1.00	24.97	A	C
ATOM	246	C	PHE	227	63.427	-8.138	-22.678	1.00	28.82	A	C
ATOM	247	O	PHE	227	63.870	-9.086	-23.331	1.00	28.43	A	O
ATOM	248	N	ALA	228	63.112	-8.205	-21.390	1.00	31.42	A	N
ATOM	249	CA	ALA	228	63.249	-9.423	-20.612	1.00	33.94	A	C
ATOM	250	CB	ALA	228	62.719	-9.198	-19.213	1.00	34.01	A	C
ATOM	251	C	ALA	228	62.505	-10.568	-21.270	1.00	35.53	A	C
ATOM	252	O	ALA	228	61.385	-10.392	-21.757	1.00	36.36	A	O
ATOM	253	N	PRO	229	63.141	-11.749	-21.338	1.00	36.97	A	N
ATOM	254	CD	PRO	229	64.494	-12.071	-20.851	1.00	37.70	A	C
ATOM	255	CA	PRO	229	62.509	-12.921	-21.947	1.00	38.54	A	C
ATOM	256	CB	PRO	229	63.603	-13.992	-21.862	1.00	38.48	A	C
ATOM	257	CG	PRO	229	64.416	-13.568	-20.660	1.00	38.46	A	C
ATOM	258	C	PRO	229	61.254	-13.297	-21.162	1.00	40.13	A	C
ATOM	259	O	PRO	229	61.284	-13.455	-19.934	1.00	39.68	A	O
ATOM	260	N	PRO	230	60.121	-13.378	-21.868	1.00	41.63	A	N
ATOM	261	CD	PRO	230	60.048	-13.199	-23.328	1.00	42.34	A	C
ATOM	262	CA	PRO	230	58.810	-13.718	-21.318	1.00	42.97	A	C
ATOM	263	CB	PRO	230	57.920	-13.742	-22.560	1.00	43.86	A	C
ATOM	264	CG	PRO	230	58.897	-14.081	-23.687	1.00	43.34	A	C
ATOM	265	C	PRO	230	58.764	-15.033	-20.540	1.00	44.43	A	C
ATOM	266	O	PRO	230	59.531	-15.967	-20.807	1.00	43.83	A	O
ATOM	267	N	TYR	231	57.846	-15.072	-19.574	1.00	46.22	A	N
ATOM	268	CA	TYR	231	57.626	-16.213	-18.687	1.00	47.94	A	C

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ATOM	269	CB	TYR	231	56.701	-15.798	-17.533	1.00	46.19	A	C
ATOM	270	CG	TYR	231	56.235	-16.922	-16.613	1.00	45.21	A	C
ATOM	271	CD1	TYR	231	57.144	-17.812	-16.035	1.00	44.99	A	C
ATOM	272	CE1	TYR	231	56.725	-18.787	-15.109	1.00	44.87	A	C
ATOM	273	CD2	TYR	231	54.890	-17.039	-16.253	1.00	44.56	A	C
ATOM	274	CE2	TYR	231	54.465	-18.004	-15.333	1.00	44.26	A	C
ATOM	275	CZ	TYR	231	55.388	-18.871	-14.762	1.00	44.51	A	C
ATOM	276	OH	TYR	231	54.979	-19.794	-13.826	1.00	43.68	A	O
ATOM	277	C	TYR	231	57.054	-17.453	-19.363	1.00	50.06	A	C
ATOM	278	O	TYR	231	56.027	-17.400	-20.062	1.00	49.91	A	O
ATOM	279	N	GLU	232	57.756	-18.564	-19.151	1.00	52.83	A	N
ATOM	280	CA	GLU	232	57.352	-19.874	-19.651	1.00	55.07	A	C
ATOM	281	CB	GLU	232	58.534	-20.602	-20.325	1.00	56.10	A	C
ATOM	282	CG	GLU	232	59.314	-19.779	-21.395	1.00	58.25	A	C
ATOM	283	CD	GLU	232	58.782	-19.907	-22.842	1.00	59.42	A	C
ATOM	284	OE1	GLU	232	59.608	-20.115	-23.765	1.00	59.50	A	O
ATOM	285	OE2	GLU	232	57.557	-19.770	-23.069	1.00	60.06	A	O
ATOM	286	C	GLU	232	56.945	-20.560	-18.333	1.00	55.74	A	C
ATOM	287	O	GLU	232	57.775	-20.755	-17.439	1.00	55.29	A	O
ATOM	288	N	PRO	233	55.641	-20.844	-18.165	1.00	56.85	A	N
ATOM	289	CD	PRO	233	54.615	-20.660	-19.208	1.00	57.80	A	C
ATOM	290	CA	PRO	233	55.050	-21.483	-16.980	1.00	57.38	A	C
ATOM	291	CB	PRO	233	53.557	-21.462	-17.290	1.00	57.55	A	C
ATOM	292	CG	PRO	233	53.540	-21.643	-18.771	1.00	58.33	A	C
ATOM	293	C	PRO	233	55.522	-22.888	-16.638	1.00	57.34	A	C
ATOM	294	O	PRO	233	56.047	-23.626	-17.479	1.00	57.64	A	O
ATOM	295	N	LEU	234	55.269	-23.250	-15.386	1.00	56.73	A	N
ATOM	296	CA	LEU	234	55.647	-24.539	-14.825	1.00	56.15	A	C
ATOM	297	CB	LEU	234	55.565	-24.499	-13.293	1.00	55.05	A	C
ATOM	298	CG	LEU	234	55.283	-23.152	-12.623	1.00	54.52	A	C
ATOM	299	CD1	LEU	234	56.380	-22.160	-12.996	1.00	54.51	A	C
ATOM	300	CD2	LEU	234	53.900	-22.617	-13.015	1.00	54.44	A	C
ATOM	301	C	LEU	234	54.782	-25.681	-15.338	1.00	56.31	A	C
ATOM	302	O	LEU	234	53.546	-25.579	-15.371	1.00	56.39	A	O
ATOM	303	N	PRO	235	55.428	-26.763	-15.802	1.00	56.11	A	N
ATOM	304	CD	PRO	235	56.874	-26.829	-16.071	1.00	55.96	A	C
ATOM	305	CA	PRO	235	54.747	-27.954	-16.321	1.00	55.75	A	C
ATOM	306	CB	PRO	235	55.888	-28.763	-16.929	1.00	55.81	A	C
ATOM	307	CG	PRO	235	57.100	-28.301	-16.151	1.00	55.85	A	C
ATOM	308	C	PRO	235	54.029	-28.714	-15.203	1.00	55.70	A	C
ATOM	309	O	PRO	235	54.462	-28.713	-14.049	1.00	55.06	A	O
ATOM	310	N	GLU	236	52.942	-29.383	-15.571	1.00	55.70	A	N
ATOM	311	CA	GLU	236	52.119	-30.122	-14.627	1.00	55.25	A	C
ATOM	312	CB	GLU	236	51.094	-30.992	-15.353	1.00	57.68	A	C
ATOM	313	CG	GLU	236	50.102	-30.189	-16.203	1.00	60.88	A	C
ATOM	314	CD	GLU	236	49.704	-28.856	-15.566	1.00	62.84	A	C
ATOM	315	OE1	GLU	236	49.058	-28.864	-14.484	1.00	63.84	A	O
ATOM	316	OE2	GLU	236	50.048	-27.800	-16.157	1.00	64.01	A	O
ATOM	317	C	GLU	236	52.841	-30.931	-13.580	1.00	53.68	A	C
ATOM	318	O	GLU	236	52.342	-31.080	-12.479	1.00	52.61	A	O
ATOM	319	N	ASN	237	53.987	-31.499	-13.925	1.00	52.62	A	N
ATOM	320	CA	ASN	237	54.734	-32.255	-12.931	1.00	52.23	A	C
ATOM	321	CB	ASN	237	56.019	-32.835	-13.530	1.00	52.57	A	C
ATOM	322	CG	ASN	237	56.768	-31.837	-14.384	1.00	52.67	A	C
ATOM	323	OD1	ASN	237	56.358	-30.679	-14.512	1.00	52.79	A	O
ATOM	324	ND2	ASN	237	57.872	-32.279	-14.982	1.00	52.76	A	N
ATOM	325	C	ASN	237	55.038	-31.279	-11.794	1.00	51.59	A	C
ATOM	326	O	ASN	237	54.580	-31.468	-10.661	1.00	50.95	A	O
ATOM	327	N	VAL	238	55.729	-30.192	-12.127	1.00	51.01	A	N
ATOM	328	CA	VAL	238	56.058	-29.174	-11.142	1.00	50.41	A	C
ATOM	329	CB	VAL	238	57.251	-28.295	-11.581	1.00	49.66	A	C
ATOM	330	CG1	VAL	238	58.510	-29.148	-11.664	1.00	49.00	A	C

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ATOM	331	CG2	VAL	238	56.971	-27.633	-12.901	1.00	48.94	A	C
ATOM	332	C	VAL	238	54.799	-28.353	-10.910	1.00	50.09	A	C
ATOM	333	O	VAL	238	54.191	-27.827	-11.853	1.00	50.43	A	O
ATOM	334	N	LYS	239	54.374	-28.313	-9.652	1.00	49.16	A	N
ATOM	335	CA	LYS	239	53.153	-27.615	-9.281	1.00	48.83	A	C
ATOM	336	CB	LYS	239	52.005	-28.626	-9.127	1.00	48.83	A	C
ATOM	337	CG	LYS	239	52.139	-29.877	-10.000	1.00	47.47	A	C
ATOM	338	CD	LYS	239	50.798	-30.557	-10.296	1.00	46.85	A	C
ATOM	339	CE	LYS	239	49.906	-29.706	-11.198	1.00	46.51	A	C
ATOM	340	NZ	LYS	239	50.643	-29.160	-12.364	1.00	45.66	A	N
ATOM	341	C	LYS	239	53.308	-26.837	-7.988	1.00	48.45	A	C
ATOM	342	O	LYS	239	54.414	-26.684	-7.479	1.00	47.71	A	O
ATOM	343	N	PHE	240	52.182	-26.335	-7.484	1.00	48.43	A	N
ATOM	344	CA	PHE	240	52.131	-25.572	-6.239	1.00	49.21	A	C
ATOM	345	CB	PHE	240	51.230	-24.341	-6.425	1.00	49.67	A	C
ATOM	346	CG	PHE	240	51.189	-23.411	-5.228	1.00	49.69	A	C
ATOM	347	CD1	PHE	240	52.327	-22.709	-4.830	1.00	49.37	A	C
ATOM	348	CD2	PHE	240	50.008	-23.250	-4.498	1.00	49.54	A	C
ATOM	349	CE1	PHE	240	52.286	-21.865	-3.724	1.00	49.14	A	C
ATOM	350	CE2	PHE	240	49.962	-22.410	-3.394	1.00	49.77	A	C
ATOM	351	CZ	PHE	240	51.099	-21.717	-3.004	1.00	49.23	A	C
ATOM	352	C	PHE	240	51.577	-26.477	-5.136	1.00	49.11	A	C
ATOM	353	O	PHE	240	51.683	-27.699	-5.220	1.00	50.06	A	O
ATOM	354	N	TYR	241	50.981	-25.879	-4.113	1.00	48.78	A	N
ATOM	355	CA	TYR	241	50.418	-26.632	-3.020	1.00	49.86	A	C
ATOM	356	CB	TYR	241	51.517	-27.075	-2.060	1.00	51.81	A	C
ATOM	357	CG	TYR	241	51.761	-28.573	-2.055	1.00	52.95	A	C
ATOM	358	CD1	TYR	241	52.650	-29.170	-2.955	1.00	53.53	A	C
ATOM	359	CE1	TYR	241	52.887	-30.553	-2.930	1.00	54.16	A	C
ATOM	360	CD2	TYR	241	51.115	-29.392	-1.134	1.00	53.86	A	C
ATOM	361	CE2	TYR	241	51.340	-30.771	-1.098	1.00	54.11	A	C
ATOM	362	CZ	TYR	241	52.225	-31.345	-1.993	1.00	54.64	A	C
ATOM	363	OH	TYR	241	52.444	-32.705	-1.936	1.00	54.59	A	O
ATOM	364	C	TYR	241	49.374	-25.824	-2.296	1.00	49.63	A	C
ATOM	365	O	TYR	241	48.307	-25.586	-2.839	1.00	49.93	A	O
ATOM	366	N	TYR	242	49.720	-25.339	-1.109	1.00	49.70	A	N
ATOM	367	CA	TYR	242	48.818	-24.568	-0.246	1.00	50.19	A	C
ATOM	368	CB	TYR	242	48.000	-23.516	-1.011	1.00	49.36	A	C
ATOM	369	CG	TYR	242	47.293	-22.522	-0.106	1.00	48.50	A	C
ATOM	370	CD1	TYR	242	47.881	-22.107	1.081	1.00	48.30	A	C
ATOM	371	CE1	TYR	242	47.254	-21.198	1.920	1.00	48.19	A	C
ATOM	372	CD2	TYR	242	46.043	-21.994	-0.436	1.00	48.02	A	C
ATOM	373	CE2	TYR	242	45.402	-21.070	0.406	1.00	47.58	A	C
ATOM	374	CZ	TYR	242	46.021	-20.677	1.589	1.00	47.62	A	C
ATOM	375	OH	TYR	242	45.435	-19.767	2.455	1.00	47.09	A	O
ATOM	376	C	TYR	242	47.883	-25.516	0.512	1.00	50.88	A	C
ATOM	377	O	TYR	242	46.899	-26.036	-0.040	1.00	49.92	A	O
ATOM	378	N	ASP	243	48.203	-25.695	1.796	1.00	51.71	A	N
ATOM	379	CA	ASP	243	47.478	-26.583	2.702	1.00	52.02	A	C
ATOM	380	CB	ASP	243	46.059	-26.066	2.989	1.00	52.77	A	C
ATOM	381	CG	ASP	243	46.006	-25.140	4.210	1.00	53.73	A	C
ATOM	382	OD1	ASP	243	46.219	-25.625	5.344	1.00	53.21	A	O
ATOM	383	OD2	ASP	243	45.748	-23.928	4.039	1.00	54.71	A	O
ATOM	384	C	ASP	243	47.462	-27.970	2.076	1.00	52.05	A	C
ATOM	385	O	ASP	243	46.473	-28.704	2.158	1.00	51.94	A	O
ATOM	386	N	GLY	244	48.581	-28.309	1.435	1.00	51.31	A	N
ATOM	387	CA	GLY	244	48.702	-29.593	0.780	1.00	50.53	A	C
ATOM	388	C	GLY	244	47.931	-29.593	-0.522	1.00	50.28	A	C
ATOM	389	O	GLY	244	48.330	-30.235	-1.493	1.00	49.94	A	O
ATOM	390	N	LYS	245	46.842	-28.829	-0.544	1.00	50.01	A	N
ATOM	391	CA	LYS	245	45.973	-28.733	-1.703	1.00	50.04	A	C
ATOM	392	CB	LYS	245	44.766	-27.849	-1.386	1.00	49.86	A	C

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ATOM	393	CG	LYS	245	43.669	-28.560	-0.607	1.00	50.14	A	C
ATOM	394	CD	LYS	245	42.343	-27.803	-0.712	1.00	49.95	A	C
ATOM	395	CE	LYS	245	41.178	-28.587	-0.109	1.00	49.73	A	C
ATOM	396	NZ	LYS	245	39.852	-27.943	-0.379	1.00	49.07	A	N
ATOM	397	C	LYS	245	46.664	-28.234	-2.957	1.00	49.84	A	C
ATOM	398	O	LYS	245	46.437	-27.096	-3.374	1.00	49.98	A	O
ATOM	399	N	VAL	246	47.484	-29.099	-3.557	1.00	49.80	A	N
ATOM	400	CA	VAL	246	48.219	-28.787	-4.786	1.00	50.01	A	C
ATOM	401	CB	VAL	246	48.872	-30.066	-5.405	1.00	50.31	A	C
ATOM	402	CG1	VAL	246	49.356	-29.802	-6.842	1.00	49.29	A	C
ATOM	403	CG2	VAL	246	50.026	-30.536	-4.537	1.00	49.33	A	C
ATOM	404	C	VAL	246	47.254	-28.185	-5.798	1.00	49.87	A	C
ATOM	405	O	VAL	246	46.411	-28.892	-6.361	1.00	49.87	A	O
ATOM	406	N	MET	247	47.375	-26.878	-6.018	1.00	49.89	A	N
ATOM	407	CA	MET	247	46.481	-26.201	-6.942	1.00	50.41	A	C
ATOM	408	CB	MET	247	45.323	-25.542	-6.178	1.00	50.73	A	C
ATOM	409	CG	MET	247	45.716	-24.736	-4.938	1.00	50.66	A	C
ATOM	410	SD	MET	247	46.539	-23.198	-5.332	1.00	50.62	A	S
ATOM	411	CE	MET	247	45.230	-22.336	-6.199	1.00	50.61	A	C
ATOM	412	C	MET	247	47.156	-25.200	-7.854	1.00	50.42	A	C
ATOM	413	O	MET	247	47.887	-24.330	-7.390	1.00	50.69	A	O
ATOM	414	N	ALA	248	46.896	-25.338	-9.155	1.00	50.60	A	N
ATOM	415	CA	ALA	248	47.454	-24.455	-10.178	1.00	50.36	A	C
ATOM	416	CB	ALA	248	47.095	-24.970	-11.569	1.00	50.30	A	C
ATOM	417	C	ALA	248	46.976	-23.005	-9.996	1.00	50.37	A	C
ATOM	418	O	ALA	248	46.076	-22.728	-9.191	1.00	50.21	A	O
ATOM	419	N	LEU	249	47.569	-22.089	-10.762	1.00	50.44	A	N
ATOM	420	CA	LEU	249	47.237	-20.670	-10.659	1.00	49.98	A	C
ATOM	421	CB	LEU	249	48.154	-20.001	-9.622	1.00	51.05	A	C
ATOM	422	CG	LEU	249	49.683	-20.147	-9.729	1.00	52.43	A	C
ATOM	423	CD1	LEU	249	50.385	-19.264	-8.705	1.00	52.40	A	C
ATOM	424	CD2	LEU	249	50.106	-21.593	-9.523	1.00	52.62	A	C
ATOM	425	C	LEU	249	47.275	-19.889	-11.980	1.00	49.07	A	C
ATOM	426	O	LEU	249	47.324	-20.475	-13.068	1.00	47.98	A	O
ATOM	427	N	SER	250	47.151	-18.566	-11.873	1.00	48.07	A	N
ATOM	428	CA	SER	250	47.192	-17.689	-13.032	1.00	47.07	A	C
ATOM	429	CB	SER	250	46.598	-16.316	-12.714	1.00	46.90	A	C
ATOM	430	OG	SER	250	47.422	-15.574	-11.827	1.00	47.79	A	O
ATOM	431	C	SER	250	48.665	-17.552	-13.358	1.00	47.19	A	C
ATOM	432	O	SER	250	49.510	-17.522	-12.460	1.00	47.88	A	O
ATOM	433	N	PRO	251	48.995	-17.471	-14.646	1.00	46.89	A	N
ATOM	434	CD	PRO	251	48.048	-17.432	-15.769	1.00	46.86	A	C
ATOM	435	CA	PRO	251	50.375	-17.343	-15.122	1.00	46.97	A	C
ATOM	436	CB	PRO	251	50.193	-17.160	-16.624	1.00	47.63	A	C
ATOM	437	CG	PRO	251	48.911	-17.898	-16.907	1.00	47.24	A	C
ATOM	438	C	PRO	251	51.070	-16.151	-14.497	1.00	46.71	A	C
ATOM	439	O	PRO	251	52.236	-16.225	-14.111	1.00	46.84	A	O
ATOM	440	N	LYS	252	50.328	-15.058	-14.390	1.00	46.53	A	N
ATOM	441	CA	LYS	252	50.845	-13.839	-13.797	1.00	47.12	A	C
ATOM	442	CB	LYS	252	49.749	-12.764	-13.752	1.00	48.92	A	C
ATOM	443	CG	LYS	252	49.025	-12.523	-15.094	1.00	51.50	A	C
ATOM	444	CD	LYS	252	49.978	-12.108	-16.242	1.00	52.99	A	C
ATOM	445	CE	LYS	252	49.232	-11.950	-17.586	1.00	53.32	A	C
ATOM	446	NZ	LYS	252	50.129	-11.576	-18.725	1.00	52.39	A	N
ATOM	447	C	LYS	252	51.304	-14.187	-12.386	1.00	45.77	A	C
ATOM	448	O	LYS	252	52.508	-14.176	-12.094	1.00	45.65	A	O
ATOM	449	N	ALA	253	50.347	-14.563	-11.539	1.00	43.83	A	N
ATOM	450	CA	ALA	253	50.654	-14.940	-10.167	1.00	42.76	A	C
ATOM	451	CB	ALA	253	49.413	-15.443	-9.478	1.00	42.42	A	C
ATOM	452	C	ALA	253	51.754	-16.010	-10.137	1.00	42.41	A	C
ATOM	453	O	ALA	253	52.669	-15.945	-9.309	1.00	41.98	A	O
ATOM	454	N	GLU	254	51.676	-16.965	-11.065	1.00	41.65	A	N

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ATOM	455	CA	GLU	254	52.665	-18.038	-11.158	1.00	41.31	A	C
ATOM	456	CB	GLU	254	52.493	-18.821	-12.450	1.00	41.64	A	C
ATOM	457	CG	GLU	254	51.670	-20.063	-12.302	1.00	43.38	A	C
ATOM	458	CD	GLU	254	50.930	-20.428	-13.574	1.00	45.39	A	C
ATOM	459	OE1	GLU	254	51.563	-20.475	-14.656	1.00	45.49	A	O
ATOM	460	OE2	GLU	254	49.708	-20.664	-13.493	1.00	45.36	A	O
ATOM	461	C	GLU	254	54.054	-17.450	-11.129	1.00	40.86	A	C
ATOM	462	O	GLU	254	54.779	-17.600	-10.141	1.00	40.21	A	O
ATOM	463	N	GLU	255	54.388	-16.720	-12.190	1.00	39.89	A	N
ATOM	464	CA	GLU	255	55.697	-16.102	-12.291	1.00	38.80	A	C
ATOM	465	CB	GLU	255	55.801	-15.222	-13.545	1.00	40.36	A	C
ATOM	466	CG	GLU	255	55.084	-13.870	-13.500	1.00	42.03	A	C
ATOM	467	CD	GLU	255	55.337	-13.015	-14.757	1.00	43.24	A	C
ATOM	468	OE1	GLU	255	56.519	-12.843	-15.171	1.00	43.25	A	O
ATOM	469	OE2	GLU	255	54.342	-12.511	-15.331	1.00	44.11	A	O
ATOM	470	C	GLU	255	56.003	-15.314	-11.022	1.00	37.40	A	C
ATOM	471	O	GLU	255	57.068	-15.477	-10.424	1.00	36.82	A	O
ATOM	472	N	VAL	256	55.029	-14.543	-10.552	1.00	35.83	A	N
ATOM	473	CA	VAL	256	55.245	-13.767	-9.343	1.00	35.18	A	C
ATOM	474	CB	VAL	256	53.997	-13.026	-8.899	1.00	35.57	A	C
ATOM	475	CG1	VAL	256	54.335	-12.147	-7.694	1.00	36.06	A	C
ATOM	476	CG2	VAL	256	53.442	-12.197	-10.054	1.00	36.79	A	C
ATOM	477	C	VAL	256	55.667	-14.689	-8.217	1.00	34.34	A	C
ATOM	478	O	VAL	256	56.687	-14.468	-7.569	1.00	34.03	A	O
ATOM	479	N	ALA	257	54.897	-15.750	-8.026	1.00	33.45	A	N
ATOM	480	CA	ALA	257	55.189	-16.722	-6.989	1.00	32.36	A	C
ATOM	481	CB	ALA	257	54.226	-17.865	-7.077	1.00	32.79	A	C
ATOM	482	C	ALA	257	56.600	-17.244	-7.140	1.00	31.46	A	C
ATOM	483	O	ALA	257	57.365	-17.242	-6.183	1.00	31.72	A	O
ATOM	484	N	THR	258	56.956	-17.632	-8.360	1.00	30.57	A	N
ATOM	485	CA	THR	258	58.283	-18.181	-8.618	1.00	31.09	A	C
ATOM	486	CB	THR	258	58.599	-18.301	-10.135	1.00	31.84	A	C
ATOM	487	OG1	THR	258	58.993	-17.026	-10.658	1.00	33.08	A	O
ATOM	488	CG2	THR	258	57.384	-18.800	-10.904	1.00	32.32	A	C
ATOM	489	C	THR	258	59.363	-17.324	-7.980	1.00	30.54	A	C
ATOM	490	O	THR	258	60.344	-17.839	-7.433	1.00	30.35	A	O
ATOM	491	N	PHE	259	59.156	-16.012	-8.032	1.00	29.60	A	N
ATOM	492	CA	PHE	259	60.111	-15.073	-7.475	1.00	28.36	A	C
ATOM	493	CB	PHE	259	59.547	-13.663	-7.522	1.00	26.59	A	C
ATOM	494	CG	PHE	259	59.224	-13.187	-8.898	1.00	23.80	A	C
ATOM	495	CD1	PHE	259	59.979	-13.603	-9.985	1.00	22.14	A	C
ATOM	496	CD2	PHE	259	58.161	-12.312	-9.108	1.00	22.60	A	C
ATOM	497	CE1	PHE	259	59.679	-13.155	-11.262	1.00	21.20	A	C
ATOM	498	CE2	PHE	259	57.853	-11.859	-10.379	1.00	21.49	A	C
ATOM	499	CZ	PHE	259	58.615	-12.282	-11.460	1.00	21.23	A	C
ATOM	500	C	PHE	259	60.370	-15.466	-6.043	1.00	28.41	A	C
ATOM	501	O	PHE	259	61.493	-15.819	-5.673	1.00	28.72	A	O
ATOM	502	N	PHE	260	59.306	-15.460	-5.254	1.00	28.46	A	N
ATOM	503	CA	PHE	260	59.419	-15.831	-3.862	1.00	30.85	A	C
ATOM	504	CB	PHE	260	58.037	-15.900	-3.221	1.00	31.28	A	C
ATOM	505	CG	PHE	260	58.069	-15.875	-1.723	1.00	31.96	A	C
ATOM	506	CD1	PHE	260	57.318	-14.943	-1.020	1.00	32.16	A	C
ATOM	507	CD2	PHE	260	58.851	-16.775	-1.011	1.00	32.32	A	C
ATOM	508	CE1	PHE	260	57.343	-14.899	0.380	1.00	34.11	A	C
ATOM	509	CE2	PHE	260	58.889	-16.745	0.387	1.00	34.31	A	C
ATOM	510	CZ	PHE	260	58.130	-15.802	1.088	1.00	34.02	A	C
ATOM	511	C	PHE	260	60.086	-17.198	-3.798	1.00	32.64	A	C
ATOM	512	O	PHE	260	61.102	-17.377	-3.118	1.00	32.83	A	O
ATOM	513	N	ALA	261	59.545	-18.130	-4.579	1.00	34.42	A	N
ATOM	514	CA	ALA	261	60.042	-19.496	-4.643	1.00	36.15	A	C
ATOM	515	CB	ALA	261	59.377	-20.232	-5.776	1.00	35.69	A	C
ATOM	516	C	ALA	261	61.550	-19.570	-4.797	1.00	37.51	A	C

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ATOM	517	O	ALA	261	62.198	-20.454	-4.236	1.00	37.83	A	O
ATOM	518	N	LYS	262	62.116	-18.611	-5.515	1.00	39.19	A	N
ATOM	519	CA	LYS	262	63.548	-18.616	-5.735	1.00	41.71	A	C
ATOM	520	CB	LYS	262	63.861	-18.094	-7.134	1.00	42.22	A	C
ATOM	521	CG	LYS	262	63.111	-18.812	-8.239	1.00	42.07	A	C
ATOM	522	CD	LYS	262	63.659	-18.430	-9.591	1.00	42.54	A	C
ATOM	523	CE	LYS	262	62.587	-18.511	-10.657	1.00	43.09	A	C
ATOM	524	NZ	LYS	262	63.168	-18.305	-12.021	1.00	44.19	A	N
ATOM	525	C	LYS	262	64.365	-17.872	-4.679	1.00	43.44	A	C
ATOM	526	O	LYS	262	65.530	-17.525	-4.913	1.00	43.34	A	O
ATOM	527	N	MET	263	63.777	-17.680	-3.499	1.00	45.94	A	N
ATOM	528	CA	MET	263	64.467	-16.989	-2.401	1.00	48.87	A	C
ATOM	529	CB	MET	263	64.337	-15.472	-2.578	1.00	50.00	A	C
ATOM	530	CG	MET	263	65.224	-14.900	-3.689	1.00	51.70	A	C
ATOM	531	SD	MET	263	64.688	-13.288	-4.300	1.00	54.59	A	S
ATOM	532	CE	MET	263	64.208	-12.463	-2.724	1.00	53.22	A	C
ATOM	533	C	MET	263	64.029	-17.408	-0.984	1.00	49.75	A	C
ATOM	534	O	MET	263	64.378	-16.747	0.002	1.00	49.16	A	O
ATOM	535	N	LEU	264	63.302	-18.523	-0.894	1.00	50.39	A	N
ATOM	536	CA	LEU	264	62.812	-19.058	0.377	1.00	51.30	A	C
ATOM	537	CB	LEU	264	62.141	-20.408	0.156	1.00	51.97	A	C
ATOM	538	CG	LEU	264	61.484	-20.676	-1.190	1.00	52.26	A	C
ATOM	539	CD1	LEU	264	61.115	-22.149	-1.289	1.00	52.37	A	C
ATOM	540	CD2	LEU	264	60.266	-19.794	-1.336	1.00	52.40	A	C
ATOM	541	C	LEU	264	63.978	-19.280	1.329	1.00	51.91	A	C
ATOM	542	O	LEU	264	63.871	-19.073	2.544	1.00	52.16	A	O
ATOM	543	N	ASP	265	65.068	-19.783	0.764	1.00	51.78	A	N
ATOM	544	CA	ASP	265	66.280	-20.049	1.514	1.00	51.69	A	C
ATOM	545	CB	ASP	265	67.256	-20.819	0.633	1.00	52.22	A	C
ATOM	546	CG	ASP	265	67.418	-20.190	-0.735	1.00	52.59	A	C
ATOM	547	OD1	ASP	265	66.428	-20.157	-1.498	1.00	53.40	A	O
ATOM	548	OD2	ASP	265	68.532	-19.720	-1.045	1.00	53.00	A	O
ATOM	549	C	ASP	265	66.897	-18.729	1.960	1.00	51.58	A	C
ATOM	550	O	ASP	265	67.439	-18.631	3.065	1.00	51.44	A	O
ATOM	551	N	HIS	266	66.752	-17.705	1.119	1.00	51.12	A	N
ATOM	552	CA	HIS	266	67.297	-16.390	1.409	1.00	50.19	A	C
ATOM	553	CB	HIS	266	67.249	-15.494	0.182	1.00	52.21	A	C
ATOM	554	CG	HIS	266	68.018	-14.217	0.345	1.00	54.85	A	C
ATOM	555	CD2	HIS	266	68.887	-13.587	-0.482	1.00	55.84	A	C
ATOM	556	ND1	HIS	266	67.948	-13.446	1.487	1.00	55.52	A	N
ATOM	557	CE1	HIS	266	68.742	-12.398	1.356	1.00	56.69	A	C
ATOM	558	NE2	HIS	266	69.324	-12.458	0.170	1.00	56.80	A	N
ATOM	559	C	HIS	266	66.633	-15.684	2.573	1.00	48.35	A	C
ATOM	560	O	HIS	266	65.418	-15.622	2.676	1.00	47.17	A	O
ATOM	561	N	GLU	267	67.476	-15.083	3.399	1.00	47.39	A	N
ATOM	562	CA	GLU	267	67.070	-14.355	4.591	1.00	46.35	A	C
ATOM	563	CB	GLU	267	68.294	-13.705	5.218	1.00	47.27	A	C
ATOM	564	CG	GLU	267	68.003	-12.882	6.448	1.00	49.53	A	C
ATOM	565	CD	GLU	267	69.097	-11.863	6.734	1.00	52.04	A	C
ATOM	566	OE1	GLU	267	70.034	-11.726	5.903	1.00	52.58	A	O
ATOM	567	OE2	GLU	267	69.009	-11.183	7.786	1.00	53.40	A	O
ATOM	568	C	GLU	267	66.005	-13.303	4.332	1.00	44.60	A	C
ATOM	569	O	GLU	267	65.281	-12.906	5.245	1.00	44.20	A	O
ATOM	570	N	TYR	268	65.922	-12.828	3.097	1.00	42.60	A	N
ATOM	571	CA	TYR	268	64.917	-11.829	2.777	1.00	40.67	A	C
ATOM	572	CB	TYR	268	64.958	-11.464	1.297	1.00	39.27	A	C
ATOM	573	CG	TYR	268	65.792	-10.241	0.988	1.00	38.20	A	C
ATOM	574	CD1	TYR	268	65.716	-9.100	1.787	1.00	36.76	A	C
ATOM	575	CE1	TYR	268	66.457	-7.970	1.489	1.00	37.16	A	C
ATOM	576	CD2	TYR	268	66.637	-10.218	-0.121	1.00	38.41	A	C
ATOM	577	CE2	TYR	268	67.382	-9.100	-0.433	1.00	37.84	A	C
ATOM	578	CZ	TYR	268	67.290	-7.977	0.372	1.00	38.06	A	C



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ATOM	579	OH	TYR	268	68.025	-6.857	0.044	1.00	39.71	A	O
ATOM	580	C	TYR	268	63.554	-12.387	3.129	1.00	40.00	A	C
ATOM	581	O	TYR	268	62.795	-11.794	3.894	1.00	39.45	A	O
ATOM	582	N	THR	269	63.296	-13.582	2.621	1.00	39.39	A	N
ATOM	583	CA	THR	269	62.037	-14.259	2.856	1.00	39.05	A	C
ATOM	584	CB	THR	269	61.987	-15.592	2.114	1.00	39.08	A	C
ATOM	585	OG1	THR	269	63.150	-16.358	2.445	1.00	40.28	A	O
ATOM	586	CG2	THR	269	61.936	-15.359	0.603	1.00	38.41	A	C
ATOM	587	C	THR	269	61.821	-14.494	4.335	1.00	39.17	A	C
ATOM	588	O	THR	269	60.690	-14.682	4.774	1.00	38.76	A	O
ATOM	589	N	THR	270	62.904	-14.485	5.107	1.00	39.60	A	N
ATOM	590	CA	THR	270	62.784	-14.679	6.551	1.00	40.97	A	C
ATOM	591	CB	THR	270	64.055	-15.318	7.174	1.00	40.76	A	C
ATOM	592	OG1	THR	270	65.080	-14.324	7.305	1.00	42.15	A	O
ATOM	593	CG2	THR	270	64.570	-16.467	6.303	1.00	40.55	A	C
ATOM	594	C	THR	270	62.527	-13.325	7.220	1.00	41.01	A	C
ATOM	595	O	THR	270	62.239	-13.254	8.420	1.00	40.91	A	O
ATOM	596	N	LYS	271	62.625	-12.262	6.424	1.00	41.85	A	N
ATOM	597	CA	LYS	271	62.422	-10.898	6.907	1.00	42.67	A	C
ATOM	598	CB	LYS	271	63.281	-9.928	6.081	1.00	42.34	A	C
ATOM	599	CG	LYS	271	64.792	-10.182	6.203	1.00	41.68	A	C
ATOM	600	CD	LYS	271	65.596	-9.273	5.285	1.00	42.43	A	C
ATOM	601	CE	LYS	271	67.096	-9.490	5.452	1.00	42.57	A	C
ATOM	602	NZ	LYS	271	67.935	-8.754	4.452	1.00	42.13	A	N
ATOM	603	C	LYS	271	60.945	-10.489	6.892	1.00	42.89	A	C
ATOM	604	O	LYS	271	60.339	-10.373	5.821	1.00	43.13	A	O
ATOM	605	N	GLU	272	60.391	-10.241	8.081	1.00	43.03	A	N
ATOM	606	CA	GLU	272	58.976	-9.872	8.241	1.00	44.00	A	C
ATOM	607	CB	GLU	272	58.676	-9.445	9.690	1.00	46.36	A	C
ATOM	608	CG	GLU	272	59.186	-10.403	10.794	1.00	49.27	A	C
ATOM	609	CD	GLU	272	58.571	-11.807	10.735	1.00	50.85	A	C
ATOM	610	OE1	GLU	272	59.191	-12.706	10.112	1.00	50.96	A	O
ATOM	611	OE2	GLU	272	57.482	-12.018	11.325	1.00	51.40	A	O
ATOM	612	C	GLU	272	58.462	-8.799	7.279	1.00	43.37	A	C
ATOM	613	O	GLU	272	57.608	-9.086	6.436	1.00	43.64	A	O
ATOM	614	N	ILE	273	59.000	-7.581	7.401	1.00	42.45	A	N
ATOM	615	CA	ILE	273	58.614	-6.426	6.567	1.00	41.48	A	C
ATOM	616	CB	ILE	273	59.569	-5.190	6.751	1.00	42.22	A	C
ATOM	617	CG2	ILE	273	58.797	-3.893	6.536	1.00	41.05	A	C
ATOM	618	CG1	ILE	273	60.202	-5.160	8.152	1.00	43.78	A	C
ATOM	619	CD1	ILE	273	61.374	-6.142	8.351	1.00	44.19	A	C
ATOM	620	C	ILE	273	58.665	-6.808	5.095	1.00	40.43	A	C
ATOM	621	O	ILE	273	57.817	-6.412	4.292	1.00	40.03	A	O
ATOM	622	N	PHE	274	59.684	-7.580	4.752	1.00	39.64	A	N
ATOM	623	CA	PHE	274	59.849	-8.032	3.394	1.00	39.52	A	C
ATOM	624	CB	PHE	274	61.076	-8.925	3.288	1.00	37.48	A	C
ATOM	625	CG	PHE	274	61.319	-9.421	1.912	1.00	35.82	A	C
ATOM	626	CD1	PHE	274	62.363	-8.911	1.161	1.00	35.87	A	C
ATOM	627	CD2	PHE	274	60.473	-10.363	1.340	1.00	35.18	A	C
ATOM	628	CE1	PHE	274	62.565	-9.324	-0.142	1.00	36.17	A	C
ATOM	629	CE2	PHE	274	60.661	-10.784	0.041	1.00	36.09	A	C
ATOM	630	CZ	PHE	274	61.714	-10.262	-0.709	1.00	36.24	A	C
ATOM	631	C	PHE	274	58.623	-8.818	2.962	1.00	40.26	A	C
ATOM	632	O	PHE	274	58.113	-8.632	1.854	1.00	40.44	A	O
ATOM	633	N	ARG	275	58.186	-9.724	3.831	1.00	41.37	A	N
ATOM	634	CA	ARG	275	57.037	-10.570	3.548	1.00	42.60	A	C
ATOM	635	CB	ARG	275	56.818	-11.566	4.676	1.00	44.19	A	C
ATOM	636	CG	ARG	275	57.752	-12.757	4.600	1.00	47.37	A	C
ATOM	637	CD	ARG	275	58.707	-12.788	5.775	1.00	50.63	A	C
ATOM	638	NE	ARG	275	58.003	-12.727	7.052	1.00	53.65	A	N
ATOM	639	CZ	ARG	275	57.098	-13.616	7.458	1.00	54.87	A	C
ATOM	640	NH1	ARG	275	56.776	-14.657	6.686	1.00	55.62	A	N

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ATOM	641	NH2	ARG	275	56.503	-13.456	8.638	1.00	55.51	A	N
ATOM	642	C	ARG	275	55.750	-9.825	3.256	1.00	42.35	A	C
ATOM	643	O	ARG	275	55.084	-10.107	2.253	1.00	42.70	A	O
ATOM	644	N	ALA	276	55.400	-8.883	4.132	1.00	41.85	A	N
ATOM	645	CA	ALA	276	54.185	-8.090	3.957	1.00	41.49	A	C
ATOM	646	CB	ALA	276	54.156	-6.919	4.947	1.00	40.74	A	C
ATOM	647	C	ALA	276	54.189	-7.573	2.532	1.00	41.48	A	C
ATOM	648	O	ALA	276	53.247	-7.808	1.775	1.00	40.93	A	O
ATOM	649	N	ASN	277	55.319	-6.977	2.158	1.00	42.06	A	N
ATOM	650	CA	ASN	277	55.520	-6.419	0.828	1.00	43.29	A	C
ATOM	651	CB	ASN	277	56.966	-5.941	0.650	1.00	42.73	A	C
ATOM	652	CG	ASN	277	57.255	-4.631	1.376	1.00	42.53	A	C
ATOM	653	OD1	ASN	277	58.157	-3.880	0.990	1.00	41.78	A	O
ATOM	654	ND2	ASN	277	56.496	-4.354	2.436	1.00	43.08	A	N
ATOM	655	C	ASN	277	55.174	-7.456	-0.224	1.00	43.89	A	C
ATOM	656	O	ASN	277	54.484	-7.152	-1.200	1.00	44.30	A	O
ATOM	657	N	PHE	278	55.623	-8.686	-0.016	1.00	44.98	A	N
ATOM	658	CA	PHE	278	55.306	-9.738	-0.969	1.00	47.21	A	C
ATOM	659	CB	PHE	278	56.005	-11.043	-0.585	1.00	49.18	A	C
ATOM	660	CG	PHE	278	55.490	-12.244	-1.332	1.00	50.30	A	C
ATOM	661	CD1	PHE	278	55.883	-12.483	-2.646	1.00	50.86	A	C
ATOM	662	CD2	PHE	278	54.602	-13.130	-0.723	1.00	50.57	A	C
ATOM	663	CE1	PHE	278	55.400	-13.592	-3.346	1.00	51.50	A	C
ATOM	664	CE2	PHE	278	54.117	-14.232	-1.409	1.00	51.19	A	C
ATOM	665	CZ	PHE	278	54.519	-14.465	-2.727	1.00	51.25	A	C
ATOM	666	C	PHE	278	53.783	-9.958	-1.045	1.00	46.98	A	C
ATOM	667	O	PHE	278	53.125	-9.504	-1.988	1.00	47.40	A	O
ATOM	668	N	PHE	279	53.257	-10.652	-0.037	1.00	46.34	A	N
ATOM	669	CA	PHE	279	51.844	-10.981	0.105	1.00	46.20	A	C
ATOM	670	CB	PHE	279	51.480	-10.903	1.591	1.00	47.31	A	C
ATOM	671	CG	PHE	279	50.414	-11.882	2.027	1.00	48.65	A	C
ATOM	672	CD1	PHE	279	50.021	-12.940	1.200	1.00	48.82	A	C
ATOM	673	CD2	PHE	279	49.823	-11.756	3.292	1.00	48.63	A	C
ATOM	674	CE1	PHE	279	49.056	-13.857	1.629	1.00	48.92	A	C
ATOM	675	CE2	PHE	279	48.859	-12.664	3.733	1.00	48.99	A	C
ATOM	676	CZ	PHE	279	48.472	-13.720	2.899	1.00	49.26	A	C
ATOM	677	C	PHE	279	50.945	-10.030	-0.672	1.00	45.78	A	C
ATOM	678	O	PHE	279	50.422	-10.379	-1.738	1.00	45.60	A	O
ATOM	679	N	LYS	280	50.850	-8.805	-0.155	1.00	45.31	A	N
ATOM	680	CA	LYS	280	50.030	-7.734	-0.721	1.00	44.94	A	C
ATOM	681	CB	LYS	280	50.311	-6.427	0.014	1.00	45.15	A	C
ATOM	682	CG	LYS	280	49.550	-5.245	-0.535	1.00	45.41	A	C
ATOM	683	CD	LYS	280	49.766	-4.020	0.329	1.00	46.73	A	C
ATOM	684	CE	LYS	280	48.977	-2.819	-0.197	1.00	48.09	A	C
ATOM	685	NZ	LYS	280	49.461	-2.325	-1.531	1.00	48.82	A	N
ATOM	686	C	LYS	280	50.165	-7.503	-2.216	1.00	44.03	A	C
ATOM	687	O	LYS	280	49.157	-7.440	-2.924	1.00	43.30	A	O
ATOM	688	N	ASP	281	51.402	-7.324	-2.674	1.00	44.09	A	N
ATOM	689	CA	ASP	281	51.677	-7.089	-4.091	1.00	44.86	A	C
ATOM	690	CB	ASP	281	53.180	-6.872	-4.335	1.00	44.48	A	C
ATOM	691	CG	ASP	281	53.647	-5.456	-3.996	1.00	44.58	A	C
ATOM	692	OD1	ASP	281	54.630	-4.997	-4.628	1.00	43.71	A	O
ATOM	693	OD2	ASP	281	53.050	-4.809	-3.097	1.00	44.09	A	O
ATOM	694	C	ASP	281	51.213	-8.277	-4.917	1.00	45.23	A	C
ATOM	695	O	ASP	281	50.637	-8.118	-5.997	1.00	45.28	A	O
ATOM	696	N	TRP	282	51.434	-9.468	-4.371	1.00	45.92	A	N
ATOM	697	CA	TRP	282	51.078	-10.713	-5.036	1.00	46.27	A	C
ATOM	698	CB	TRP	282	51.436	-11.892	-4.143	1.00	46.59	A	C
ATOM	699	CG	TRP	282	51.598	-13.159	-4.888	1.00	46.28	A	C
ATOM	700	CD2	TRP	282	51.566	-14.475	-4.341	1.00	46.20	A	C
ATOM	701	CE2	TRP	282	51.818	-15.374	-5.402	1.00	46.32	A	C
ATOM	702	CE3	TRP	282	51.353	-14.988	-3.052	1.00	46.70	A	C

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ATOM	703	CD1	TRP	282	51.851	-13.302	-6.222	1.00	46.43	A	C
ATOM	704	NE1	TRP	282	51.990	-14.631	-6.541	1.00	46.03	A	N
ATOM	705	CZ2	TRP	282	51.865	-16.760	-5.213	1.00	46.34	A	C
ATOM	706	CZ3	TRP	282	51.400	-16.366	-2.863	1.00	46.63	A	C
ATOM	707	CH2	TRP	282	51.655	-17.236	-3.943	1.00	46.46	A	C
ATOM	708	C	TRP	282	49.605	-10.760	-5.353	1.00	46.55	A	C
ATOM	709	O	TRP	282	49.216	-11.003	-6.493	1.00	45.64	A	O
ATOM	710	N	ARG	283	48.801	-10.544	-4.315	1.00	47.50	A	N
ATOM	711	CA	ARG	283	47.348	-10.535	-4.417	1.00	48.46	A	C
ATOM	712	CB	ARG	283	46.761	-9.716	-3.270	1.00	50.54	A	C
ATOM	713	CG	ARG	283	47.394	-9.958	-1.903	1.00	53.42	A	C
ATOM	714	CD	ARG	283	46.904	-11.225	-1.205	1.00	54.53	A	C
ATOM	715	NE	ARG	283	47.063	-11.107	0.251	1.00	56.79	A	N
ATOM	716	CZ	ARG	283	46.165	-11.516	1.153	1.00	57.99	A	C
ATOM	717	NH1	ARG	283	45.029	-12.089	0.763	1.00	57.85	A	N
ATOM	718	NH2	ARG	283	46.379	-11.314	2.452	1.00	58.72	A	N
ATOM	719	C	ARG	283	46.969	-9.866	-5.725	1.00	47.87	A	C
ATOM	720	O	ARG	283	46.395	-10.487	-6.626	1.00	46.98	A	O
ATOM	721	N	LYS	284	47.384	-8.610	-5.835	1.00	48.05	A	N
ATOM	722	CA	LYS	284	47.132	-7.802	-7.010	1.00	49.28	A	C
ATOM	723	CB	LYS	284	47.982	-6.531	-6.959	1.00	48.54	A	C
ATOM	724	CG	LYS	284	47.540	-5.479	-5.955	1.00	48.12	A	C
ATOM	725	CD	LYS	284	48.387	-4.207	-6.125	1.00	48.40	A	C
ATOM	726	CE	LYS	284	47.813	-2.997	-5.372	1.00	48.31	A	C
ATOM	727	NZ	LYS	284	47.810	-3.142	-3.887	1.00	47.60	A	N
ATOM	728	C	LYS	284	47.447	-8.543	-8.306	1.00	50.05	A	C
ATOM	729	O	LYS	284	46.743	-8.400	-9.305	1.00	50.03	A	O
ATOM	730	N	GLU	285	48.476	-9.376	-8.268	1.00	51.13	A	N
ATOM	731	CA	GLU	285	48.912	-10.105	-9.455	1.00	52.08	A	C
ATOM	732	CB	GLU	285	50.410	-10.380	-9.355	1.00	53.16	A	C
ATOM	733	CG	GLU	285	51.192	-9.235	-8.729	1.00	54.73	A	C
ATOM	734	CD	GLU	285	50.763	-7.866	-9.240	1.00	54.90	A	C
ATOM	735	OE1	GLU	285	50.561	-7.710	-10.470	1.00	54.76	A	O
ATOM	736	OE2	GLU	285	50.624	-6.952	-8.396	1.00	54.88	A	O
ATOM	737	C	GLU	285	48.177	-11.401	-9.776	1.00	51.53	A	C
ATOM	738	O	GLU	285	48.715	-12.289	-10.468	1.00	51.69	A	O
ATOM	739	N	MET	286	46.938	-11.503	-9.315	1.00	50.23	A	N
ATOM	740	CA	MET	286	46.191	-12.711	-9.575	1.00	48.77	A	C
ATOM	741	CB	MET	286	46.541	-13.768	-8.554	1.00	49.32	A	C
ATOM	742	CG	MET	286	46.099	-13.417	-7.167	1.00	49.27	A	C
ATOM	743	SD	MET	286	46.415	-14.799	-6.112	1.00	49.08	A	S
ATOM	744	CE	MET	286	48.171	-14.560	-5.813	1.00	49.41	A	C
ATOM	745	C	MET	286	44.711	-12.500	-9.545	1.00	48.07	A	C
ATOM	746	O	MET	286	44.223	-11.479	-9.055	1.00	47.32	A	O
ATOM	747	N	THR	287	44.012	-13.543	-9.983	1.00	47.48	A	N
ATOM	748	CA	THR	287	42.561	-13.552	-10.065	1.00	46.89	A	C
ATOM	749	CB	THR	287	42.038	-14.711	-10.932	1.00	47.55	A	C
ATOM	750	OG1	THR	287	42.183	-15.948	-10.220	1.00	48.03	A	O
ATOM	751	CG2	THR	287	42.808	-14.784	-12.241	1.00	48.22	A	C
ATOM	752	C	THR	287	41.858	-13.638	-8.731	1.00	45.50	A	C
ATOM	753	O	THR	287	42.314	-14.288	-7.787	1.00	44.07	A	O
ATOM	754	N	ASN	288	40.707	-12.985	-8.720	1.00	44.88	A	N
ATOM	755	CA	ASN	288	39.802	-12.901	-7.599	1.00	44.30	A	C
ATOM	756	CB	ASN	288	38.426	-12.525	-8.135	1.00	45.22	A	C
ATOM	757	CG	ASN	288	38.493	-12.019	-9.584	1.00	46.28	A	C
ATOM	758	OD1	ASN	288	38.700	-12.812	-10.523	1.00	45.64	A	O
ATOM	759	ND2	ASN	288	38.393	-10.694	-9.761	1.00	46.41	A	N
ATOM	760	C	ASN	288	39.778	-14.254	-6.946	1.00	43.56	A	C
ATOM	761	O	ASN	288	40.275	-14.398	-5.838	1.00	43.11	A	O
ATOM	762	N	ALA	289	39.323	-15.257	-7.695	1.00	43.51	A	N
ATOM	763	CA	ALA	289	39.248	-16.636	-7.203	1.00	43.59	A	C
ATOM	764	CB	ALA	289	39.162	-17.613	-8.378	1.00	43.24	A	C

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ATOM	765	C	ALA	289	40.460	-16.961	-6.318	1.00	43.38	A	C
ATOM	766	O	ALA	289	40.334	-17.086	-5.091	1.00	43.16	A	O
ATOM	767	N	GLU	290	41.639	-16.993	-6.938	1.00	42.92	A	N
ATOM	768	CA	GLU	290	42.891	-17.267	-6.233	1.00	42.22	A	C
ATOM	769	CB	GLU	290	44.066	-16.996	-7.176	1.00	40.38	A	C
ATOM	770	CG	GLU	290	43.861	-17.579	-8.569	1.00	39.07	A	C
ATOM	771	CD	GLU	290	44.951	-17.187	-9.553	1.00	38.58	A	C
ATOM	772	OE1	GLU	290	44.928	-16.051	-10.062	1.00	37.96	A	O
ATOM	773	OE2	GLU	290	45.830	-18.020	-9.825	1.00	36.89	A	O
ATOM	774	C	GLU	290	42.971	-16.338	-5.018	1.00	43.06	A	C
ATOM	775	O	GLU	290	43.039	-16.785	-3.865	1.00	42.48	A	O
ATOM	776	N	LYS	291	42.851	-15.043	-5.298	1.00	44.51	A	N
ATOM	777	CA	LYS	291	42.905	-14.005	-4.279	1.00	45.21	A	C
ATOM	778	CB	LYS	291	42.448	-12.654	-4.865	1.00	45.76	A	C
ATOM	779	CG	LYS	291	43.257	-12.168	-6.069	1.00	45.92	A	C
ATOM	780	CD	LYS	291	42.999	-10.701	-6.411	1.00	46.75	A	C
ATOM	781	CE	LYS	291	41.529	-10.423	-6.684	1.00	47.69	A	C
ATOM	782	NZ	LYS	291	41.323	-9.173	-7.468	1.00	47.84	A	N
ATOM	783	C	LYS	291	42.025	-14.367	-3.090	1.00	45.10	A	C
ATOM	784	O	LYS	291	42.374	-14.105	-1.939	1.00	44.85	A	O
ATOM	785	N	ASN	292	40.913	-15.029	-3.381	1.00	45.20	A	N
ATOM	786	CA	ASN	292	39.962	-15.402	-2.349	1.00	45.97	A	C
ATOM	787	CB	ASN	292	38.641	-15.831	-2.987	1.00	46.70	A	C
ATOM	788	CG	ASN	292	38.181	-14.879	-4.082	1.00	47.97	A	C
ATOM	789	OD1	ASN	292	37.458	-15.276	-5.001	1.00	48.37	A	O
ATOM	790	ND2	ASN	292	38.619	-13.620	-4.005	1.00	48.35	A	N
ATOM	791	C	ASN	292	40.474	-16.520	-1.475	1.00	45.69	A	C
ATOM	792	O	ASN	292	40.480	-16.418	-0.240	1.00	45.85	A	O
ATOM	793	N	ILE	293	40.939	-17.573	-2.132	1.00	45.33	A	N
ATOM	794	CA	ILE	293	41.417	-18.758	-1.440	1.00	44.96	A	C
ATOM	795	CB	ILE	293	41.504	-19.978	-2.396	1.00	43.52	A	C
ATOM	796	CG2	ILE	293	40.345	-19.940	-3.382	1.00	43.21	A	C
ATOM	797	CG1	ILE	293	42.836	-19.993	-3.164	1.00	43.11	A	C
ATOM	798	CD1	ILE	293	43.768	-21.146	-2.791	1.00	40.37	A	C
ATOM	799	C	ILE	293	42.727	-18.630	-0.673	1.00	45.25	A	C
ATOM	800	O	ILE	293	42.875	-19.255	0.383	1.00	45.23	A	O
ATOM	801	N	ILE	294	43.664	-17.822	-1.173	1.00	45.44	A	N
ATOM	802	CA	ILE	294	44.954	-17.704	-0.496	1.00	45.45	A	C
ATOM	803	CB	ILE	294	46.118	-17.626	-1.497	1.00	45.12	A	C
ATOM	804	CG2	ILE	294	47.377	-18.209	-0.855	1.00	44.43	A	C
ATOM	805	CG1	ILE	294	45.771	-18.450	-2.743	1.00	45.25	A	C
ATOM	806	CD1	ILE	294	46.906	-18.659	-3.728	1.00	45.33	A	C
ATOM	807	C	ILE	294	45.045	-16.612	0.568	1.00	45.76	A	C
ATOM	808	O	ILE	294	46.000	-15.838	0.631	1.00	45.47	A	O
ATOM	809	N	THR	295	44.059	-16.614	1.453	1.00	46.35	A	N
ATOM	810	CA	THR	295	43.986	-15.667	2.553	1.00	47.08	A	C
ATOM	811	CB	THR	295	42.719	-15.939	3.412	1.00	48.28	A	C
ATOM	812	OG1	THR	295	42.755	-15.145	4.610	1.00	48.92	A	O
ATOM	813	CG2	THR	295	42.615	-17.440	3.778	1.00	48.74	A	C
ATOM	814	C	THR	295	45.218	-15.795	3.442	1.00	47.49	A	C
ATOM	815	O	THR	295	45.385	-15.038	4.402	1.00	47.87	A	O
ATOM	816	N	ASN	296	46.074	-16.761	3.133	1.00	47.76	A	N
ATOM	817	CA	ASN	296	47.260	-16.963	3.939	1.00	48.46	A	C
ATOM	818	CB	ASN	296	46.892	-17.745	5.201	1.00	48.56	A	C
ATOM	819	CG	ASN	296	47.959	-17.655	6.253	1.00	48.67	A	C
ATOM	820	OD1	ASN	296	48.648	-16.640	6.361	1.00	49.20	A	O
ATOM	821	ND2	ASN	296	48.122	-18.714	7.024	1.00	48.62	A	N
ATOM	822	C	ASN	296	48.411	-17.655	3.214	1.00	48.34	A	C
ATOM	823	O	ASN	296	48.274	-18.784	2.759	1.00	48.50	A	O
ATOM	824	N	LEU	297	49.541	-16.960	3.094	1.00	48.86	A	N
ATOM	825	CA	LEU	297	50.726	-17.533	2.446	1.00	48.99	A	C
ATOM	826	CB	LEU	297	51.704	-16.444	1.963	1.00	49.90	A	C

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ATOM	827	CG	LEU	297	52.778	-15.903	2.927	1.00	50.08	A	C
ATOM	828	CD1	LEU	297	53.884	-15.202	2.131	1.00	49.13	A	C
ATOM	829	CD2	LEU	297	52.160	-14.980	3.998	1.00	49.35	A	C
ATOM	830	C	LEU	297	51.389	-18.356	3.525	1.00	48.19	A	C
ATOM	831	O	LEU	297	52.157	-19.280	3.249	1.00	47.18	A	O
ATOM	832	N	SER	298	51.093	-17.968	4.764	1.00	48.20	A	N
ATOM	833	CA	SER	298	51.591	-18.631	5.954	1.00	48.88	A	C
ATOM	834	CB	SER	298	51.296	-17.763	7.185	1.00	49.96	A	C
ATOM	835	OG	SER	298	51.774	-18.344	8.386	1.00	50.72	A	O
ATOM	836	C	SER	298	50.820	-19.943	6.015	1.00	48.73	A	C
ATOM	837	O	SER	298	50.291	-20.317	7.057	1.00	48.13	A	O
ATOM	838	N	LYS	299	50.708	-20.574	4.846	1.00	48.73	A	N
ATOM	839	CA	LYS	299	50.032	-21.845	4.616	1.00	48.71	A	C
ATOM	840	CB	LYS	299	48.507	-21.712	4.755	1.00	49.25	A	C
ATOM	841	CG	LYS	299	47.994	-21.692	6.177	1.00	50.82	A	C
ATOM	842	CD	LYS	299	46.495	-21.458	6.249	1.00	52.89	A	C
ATOM	843	CE	LYS	299	46.071	-20.973	7.647	1.00	53.33	A	C
ATOM	844	NZ	LYS	299	46.593	-21.802	8.778	1.00	53.15	A	N
ATOM	845	C	LYS	299	50.373	-22.309	3.201	1.00	48.05	A	C
ATOM	846	O	LYS	299	49.935	-23.372	2.767	1.00	48.04	A	O
ATOM	847	N	CYS	300	51.133	-21.503	2.468	1.00	47.79	A	N
ATOM	848	CA	CYS	300	51.515	-21.873	1.108	1.00	48.32	A	C
ATOM	849	CB	CYS	300	51.730	-20.623	0.239	1.00	48.98	A	C
ATOM	850	SG	CYS	300	50.166	-19.870	-0.382	1.00	50.86	A	S
ATOM	851	C	CYS	300	52.745	-22.778	1.107	1.00	47.78	A	C
ATOM	852	O	CYS	300	53.366	-22.981	2.147	1.00	47.36	A	O
ATOM	853	N	ASP	301	53.083	-23.340	-0.049	1.00	47.51	A	N
ATOM	854	CA	ASP	301	54.229	-24.235	-0.134	1.00	47.67	A	C
ATOM	855	CB	ASP	301	53.760	-25.680	0.066	1.00	49.11	A	C
ATOM	856	CG	ASP	301	54.911	-26.680	0.066	1.00	50.93	A	C
ATOM	857	OD1	ASP	301	55.506	-26.917	1.152	1.00	51.42	A	O
ATOM	858	OD2	ASP	301	55.209	-27.236	-1.020	1.00	51.12	A	O
ATOM	859	C	ASP	301	54.974	-24.093	-1.456	1.00	46.74	A	C
ATOM	860	O	ASP	301	54.627	-24.736	-2.452	1.00	45.85	A	O
ATOM	861	N	PHE	302	56.012	-23.259	-1.452	1.00	46.60	A	N
ATOM	862	CA	PHE	302	56.813	-23.012	-2.656	1.00	46.98	A	C
ATOM	863	CB	PHE	302	57.389	-21.585	-2.645	1.00	46.26	A	C
ATOM	864	CG	PHE	302	56.341	-20.501	-2.622	1.00	45.95	A	C
ATOM	865	CD1	PHE	302	56.028	-19.791	-3.783	1.00	45.07	A	C
ATOM	866	CD2	PHE	302	55.638	-20.214	-1.446	1.00	45.89	A	C
ATOM	867	CE1	PHE	302	55.021	-18.810	-3.782	1.00	44.83	A	C
ATOM	868	CE2	PHE	302	54.631	-19.238	-1.431	1.00	45.31	A	C
ATOM	869	CZ	PHE	302	54.324	-18.536	-2.606	1.00	44.99	A	C
ATOM	870	C	PHE	302	57.955	-24.004	-2.765	1.00	47.30	A	C
ATOM	871	O	PHE	302	58.651	-24.050	-3.781	1.00	46.32	A	O
ATOM	872	N	THR	303	58.138	-24.786	-1.703	1.00	48.29	A	N
ATOM	873	CA	THR	303	59.204	-25.781	-1.610	1.00	49.90	A	C
ATOM	874	CB	THR	303	58.919	-26.768	-0.480	1.00	49.78	A	C
ATOM	875	OG1	THR	303	57.789	-27.572	-0.832	1.00	50.33	A	O
ATOM	876	CG2	THR	303	58.605	-26.017	0.807	1.00	49.97	A	C
ATOM	877	C	THR	303	59.396	-26.556	-2.907	1.00	51.43	A	C
ATOM	878	O	THR	303	60.495	-26.591	-3.468	1.00	51.30	A	O
ATOM	879	N	GLN	304	58.305	-27.135	-3.394	1.00	52.99	A	N
ATOM	880	CA	GLN	304	58.326	-27.897	-4.625	1.00	55.22	A	C
ATOM	881	CB	GLN	304	56.899	-28.284	-5.015	1.00	57.02	A	C
ATOM	882	CG	GLN	304	56.806	-29.065	-6.334	1.00	59.27	A	C
ATOM	883	CD	GLN	304	55.371	-29.394	-6.756	1.00	60.38	A	C
ATOM	884	OE1	GLN	304	54.407	-29.165	-6.007	1.00	61.05	A	O
ATOM	885	NE2	GLN	304	55.226	-29.935	-7.965	1.00	60.53	A	N
ATOM	886	C	GLN	304	58.931	-27.034	-5.716	1.00	56.42	A	C
ATOM	887	O	GLN	304	59.899	-27.426	-6.369	1.00	56.52	A	O
ATOM	888	N	MET	305	58.375	-25.830	-5.850	1.00	57.67	A	N

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ATOM	889	CA	MET	305	58.794	-24.837	-6.845	1.00	58.58	A	C
ATOM	890	CB	MET	305	57.992	-23.543	-6.650	1.00	59.23	A	C
ATOM	891	CG	MET	305	56.530	-23.760	-6.243	1.00	60.06	A	C
ATOM	892	SD	MET	305	55.553	-22.229	-6.083	1.00	62.30	A	S
ATOM	893	CE	MET	305	55.520	-21.689	-7.829	1.00	60.91	A	C
ATOM	894	C	MET	305	60.291	-24.536	-6.737	1.00	58.48	A	C
ATOM	895	O	MET	305	60.997	-24.421	-7.752	1.00	58.70	A	O
ATOM	896	N	SER	306	60.757	-24.393	-5.498	1.00	58.15	A	N
ATOM	897	CA	SER	306	62.161	-24.132	-5.222	1.00	57.98	A	C
ATOM	898	CB	SER	306	62.396	-24.206	-3.711	1.00	58.26	A	C
ATOM	899	OG	SER	306	63.776	-24.268	-3.405	1.00	58.49	A	O
ATOM	900	C	SER	306	62.976	-25.214	-5.920	1.00	57.67	A	C
ATOM	901	O	SER	306	63.834	-24.929	-6.779	1.00	56.64	A	O
ATOM	902	N	GLN	307	62.602	-26.454	-5.592	1.00	57.57	A	N
ATOM	903	CA	GLN	307	63.213	-27.676	-6.103	1.00	56.99	A	C
ATOM	904	CB	GLN	307	62.316	-28.875	-5.789	1.00	58.42	A	C
ATOM	905	CG	GLN	307	61.866	-28.964	-4.341	1.00	60.29	A	C
ATOM	906	CD	GLN	307	63.024	-28.878	-3.363	1.00	61.55	A	C
ATOM	907	OE1	GLN	307	63.326	-27.800	-2.834	1.00	61.93	A	O
ATOM	908	NE2	GLN	307	63.686	-30.012	-3.122	1.00	61.97	A	N
ATOM	909	C	GLN	307	63.480	-27.646	-7.596	1.00	55.86	A	C
ATOM	910	O	GLN	307	64.622	-27.823	-8.034	1.00	55.87	A	O
ATOM	911	N	TYR	308	62.419	-27.425	-8.369	1.00	53.70	A	N
ATOM	912	CA	TYR	308	62.529	-27.377	-9.815	1.00	51.01	A	C
ATOM	913	CB	TYR	308	61.216	-26.913	-10.447	1.00	51.33	A	C
ATOM	914	CG	TYR	308	61.233	-26.889	-11.971	1.00	52.28	A	C
ATOM	915	CD1	TYR	308	62.380	-27.250	-12.698	1.00	52.07	A	C
ATOM	916	CE1	TYR	308	62.401	-27.221	-14.080	1.00	51.62	A	C
ATOM	917	CD2	TYR	308	60.103	-26.501	-12.689	1.00	52.91	A	C
ATOM	918	CE2	TYR	308	60.111	-26.473	-14.081	1.00	52.51	A	C
ATOM	919	CZ	TYR	308	61.264	-26.831	-14.767	1.00	52.49	A	C
ATOM	920	OH	TYR	308	61.277	-26.790	-16.143	1.00	53.26	A	O
ATOM	921	C	TYR	308	63.658	-26.456	-10.240	1.00	49.07	A	C
ATOM	922	O	TYR	308	64.598	-26.882	-10.907	1.00	48.26	A	O
ATOM	923	N	PHE	309	63.582	-25.198	-9.845	1.00	47.46	A	N
ATOM	924	CA	PHE	309	64.619	-24.279	-10.248	1.00	46.12	A	C
ATOM	925	CB	PHE	309	64.308	-22.884	-9.760	1.00	45.46	A	C
ATOM	926	CG	PHE	309	63.192	-22.269	-10.514	1.00	44.50	A	C
ATOM	927	CD1	PHE	309	63.367	-21.928	-11.855	1.00	44.43	A	C
ATOM	928	CD2	PHE	309	61.940	-22.135	-9.939	1.00	43.73	A	C
ATOM	929	CE1	PHE	309	62.310	-21.469	-12.618	1.00	44.22	A	C
ATOM	930	CE2	PHE	309	60.868	-21.675	-10.692	1.00	44.38	A	C
ATOM	931	CZ	PHE	309	61.055	-21.342	-12.040	1.00	44.45	A	C
ATOM	932	C	PHE	309	65.997	-24.734	-9.877	1.00	45.35	A	C
ATOM	933	O	PHE	309	66.885	-24.749	-10.721	1.00	44.36	A	O
ATOM	934	N	LYS	310	66.152	-25.200	-8.648	1.00	45.35	A	N
ATOM	935	CA	LYS	310	67.447	-25.691	-8.217	1.00	46.06	A	C
ATOM	936	CB	LYS	310	67.365	-26.199	-6.782	1.00	46.22	A	C
ATOM	937	CG	LYS	310	66.615	-25.273	-5.850	1.00	46.96	A	C
ATOM	938	CD	LYS	310	66.610	-25.821	-4.429	1.00	47.44	A	C
ATOM	939	CE	LYS	310	67.728	-25.213	-3.565	1.00	47.85	A	C
ATOM	940	NZ	LYS	310	69.121	-25.380	-4.095	1.00	47.86	A	N
ATOM	941	C	LYS	310	67.822	-26.840	-9.157	1.00	46.32	A	C
ATOM	942	O	LYS	310	68.970	-26.956	-9.593	1.00	46.14	A	O
ATOM	943	N	ALA	311	66.825	-27.652	-9.503	1.00	46.54	A	N
ATOM	944	CA	ALA	311	67.032	-28.789	-10.391	1.00	46.71	A	C
ATOM	945	CB	ALA	311	65.749	-29.589	-10.531	1.00	46.72	A	C
ATOM	946	C	ALA	311	67.474	-28.269	-11.741	1.00	46.72	A	C
ATOM	947	O	ALA	311	68.596	-28.524	-12.180	1.00	46.23	A	O
ATOM	948	N	GLN	312	66.587	-27.508	-12.370	1.00	47.03	A	N
ATOM	949	CA	GLN	312	66.846	-26.905	-13.664	1.00	47.67	A	C
ATOM	950	CB	GLN	312	65.775	-25.843	-13.946	1.00	48.67	A	C

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ATOM	951	CG	GLN	312	66.182	-24.726	-14.895	1.00	51.10	A	C
ATOM	952	CD	GLN	312	66.794	-23.531	-14.160	1.00	53.12	A	C
ATOM	953	OE1	GLN	312	67.985	-23.219	-14.322	1.00	54.01	A	O
ATOM	954	NE2	GLN	312	65.980	-22.862	-13.338	1.00	54.42	A	N
ATOM	955	C	GLN	312	68.245	-26.303	-13.632	1.00	47.74	A	C
ATOM	956	O	GLN	312	68.991	-26.370	-14.612	1.00	47.24	A	O
ATOM	957	N	THR	313	68.613	-25.790	-12.462	1.00	48.67	A	N
ATOM	958	CA	THR	313	69.920	-25.187	-12.251	1.00	50.12	A	C
ATOM	959	CB	THR	313	70.047	-24.589	-10.823	1.00	50.45	A	C
ATOM	960	OG1	THR	313	69.038	-23.588	-10.627	1.00	50.17	A	O
ATOM	961	CG2	THR	313	71.435	-23.976	-10.606	1.00	50.29	A	C
ATOM	962	C	THR	313	70.985	-26.258	-12.435	1.00	50.76	A	C
ATOM	963	O	THR	313	71.723	-26.241	-13.421	1.00	50.57	A	O
ATOM	964	N	ALA	314	71.029	-27.206	-11.499	1.00	51.45	A	N
ATOM	965	CA	ALA	314	71.998	-28.298	-11.544	1.00	52.22	A	C
ATOM	966	CB	ALA	314	71.658	-29.344	-10.487	1.00	52.12	A	C
ATOM	967	C	ALA	314	71.976	-28.915	-12.938	1.00	52.29	A	C
ATOM	968	O	ALA	314	72.996	-29.362	-13.459	1.00	51.68	A	O
ATOM	969	N	ALA	315	70.795	-28.911	-13.540	1.00	52.84	A	N
ATOM	970	CA	ALA	315	70.633	-29.432	-14.877	1.00	53.75	A	C
ATOM	971	CB	ALA	315	69.178	-29.373	-15.280	1.00	54.35	A	C
ATOM	972	C	ALA	315	71.476	-28.543	-15.780	1.00	54.21	A	C
ATOM	973	O	ALA	315	72.381	-29.020	-16.463	1.00	54.33	A	O
ATOM	974	N	ALA	316	71.196	-27.243	-15.746	1.00	54.50	A	N
ATOM	975	CA	ALA	316	71.939	-26.277	-16.545	1.00	55.08	A	C
ATOM	976	CB	ALA	316	71.493	-24.867	-16.201	1.00	55.13	A	C
ATOM	977	C	ALA	316	73.413	-26.466	-16.213	1.00	55.54	A	C
ATOM	978	O	ALA	316	74.277	-26.424	-17.093	1.00	55.39	A	O
ATOM	979	N	ALA	317	73.672	-26.719	-14.931	1.00	56.06	A	N
ATOM	980	CA	ALA	317	75.016	-26.960	-14.429	1.00	56.66	A	C
ATOM	981	CB	ALA	317	75.095	-26.638	-12.944	1.00	56.83	A	C
ATOM	982	C	ALA	317	75.253	-28.437	-14.660	1.00	57.02	A	C
ATOM	983	O	ALA	317	75.532	-29.195	-13.728	1.00	57.24	A	O
ATOM	984	N	ALA	318	75.030	-28.844	-15.904	1.00	56.99	A	N
ATOM	985	CA	ALA	318	75.193	-30.225	-16.335	1.00	57.22	A	C
ATOM	986	CB	ALA	318	74.197	-31.142	-15.600	1.00	57.39	A	C
ATOM	987	C	ALA	318	74.973	-30.295	-17.843	1.00	57.54	A	C
ATOM	988	O	ALA	318	75.234	-31.320	-18.468	1.00	57.49	A	O
ATOM	989	N	ALA	319	74.496	-29.193	-18.420	1.00	57.97	A	N
ATOM	990	CA	ALA	319	74.242	-29.115	-19.857	1.00	57.97	A	C
ATOM	991	CB	ALA	319	73.638	-27.750	-20.211	1.00	57.99	A	C
ATOM	992	C	ALA	319	75.522	-29.377	-20.669	1.00	57.74	A	C
ATOM	993	O	ALA	319	76.631	-29.011	-20.247	1.00	57.66	A	O
ATOM	994	N	SER	320	75.361	-30.038	-21.816	1.00	57.33	A	N
ATOM	995	CA	SER	320	76.488	-30.373	-22.691	1.00	56.78	A	C
ATOM	996	CB	SER	320	76.016	-31.159	-23.916	1.00	57.32	A	C
ATOM	997	OG	SER	320	76.946	-31.032	-24.990	1.00	56.56	A	O
ATOM	998	C	SER	320	77.297	-29.189	-23.183	1.00	56.11	A	C
ATOM	999	O	SER	320	76.749	-28.136	-23.502	1.00	56.08	A	O
ATOM	1000	N	ALA	321	78.599	-29.413	-23.311	1.00	55.56	A	N
ATOM	1001	CA	ALA	321	79.514	-28.401	-23.800	1.00	55.33	A	C
ATOM	1002	CB	ALA	321	80.897	-28.997	-23.983	1.00	55.29	A	C
ATOM	1003	C	ALA	321	78.973	-27.914	-25.135	1.00	55.13	A	C
ATOM	1004	O	ALA	321	78.648	-26.738	-25.292	1.00	54.98	A	O
ATOM	1005	N	ALA	322	78.814	-28.845	-26.067	1.00	55.32	A	N
ATOM	1006	CA	ALA	322	78.295	-28.524	-27.386	1.00	55.82	A	C
ATOM	1007	CB	ALA	322	78.200	-29.786	-28.227	1.00	56.01	A	C
ATOM	1008	C	ALA	322	76.927	-27.863	-27.269	1.00	55.83	A	C
ATOM	1009	O	ALA	322	76.685	-26.820	-27.875	1.00	55.59	A	O
ATOM	1010	N	ALA	323	76.053	-28.462	-26.462	1.00	55.87	A	N
ATOM	1011	CA	ALA	323	74.704	-27.946	-26.250	1.00	56.58	A	C
ATOM	1012	CB	ALA	323	74.014	-28.710	-25.127	1.00	56.59	A	C

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ATOM	1013	C	ALA	323	74.754	-26.474	-25.900	1.00	56.92	A	C
ATOM	1014	O	ALA	323	74.170	-25.636	-26.594	1.00	57.31	A	O
ATOM	1015	N	LYS	324	75.477	-26.173	-24.827	1.00	56.63	A	N
ATOM	1016	CA	LYS	324	75.628	-24.810	-24.343	1.00	56.39	A	C
ATOM	1017	CB	LYS	324	76.355	-24.807	-23.008	1.00	57.26	A	C
ATOM	1018	CG	LYS	324	75.790	-25.762	-21.981	1.00	58.13	A	C
ATOM	1019	CD	LYS	324	76.728	-25.894	-20.785	1.00	59.02	A	C
ATOM	1020	CE	LYS	324	78.101	-26.450	-21.174	1.00	59.63	A	C
ATOM	1021	NZ	LYS	324	78.930	-25.512	-21.992	1.00	60.43	A	N
ATOM	1022	C	LYS	324	76.416	-23.970	-25.330	1.00	55.52	A	C
ATOM	1023	O	LYS	324	76.048	-22.832	-25.610	1.00	54.90	A	O
ATOM	1024	N	LEU	325	77.514	-24.532	-25.830	1.00	55.23	A	N
ATOM	1025	CA	LEU	325	78.372	-23.850	-26.799	1.00	55.52	A	C
ATOM	1026	CB	LEU	325	79.210	-24.865	-27.572	1.00	56.38	A	C
ATOM	1027	CG	LEU	325	79.897	-24.316	-28.823	1.00	56.74	A	C
ATOM	1028	CD1	LEU	325	81.175	-23.551	-28.461	1.00	56.58	A	C
ATOM	1029	CD2	LEU	325	80.193	-25.466	-29.764	1.00	56.92	A	C
ATOM	1030	C	LEU	325	77.524	-23.068	-27.786	1.00	54.76	A	C
ATOM	1031	O	LEU	325	77.777	-21.892	-28.039	1.00	54.01	A	O
ATOM	1032	N	ALA	326	76.509	-23.737	-28.324	1.00	53.97	A	N
ATOM	1033	CA	ALA	326	75.597	-23.119	-29.262	1.00	53.50	A	C
ATOM	1034	CB	ALA	326	74.391	-24.008	-29.479	1.00	53.56	A	C
ATOM	1035	C	ALA	326	75.173	-21.793	-28.657	1.00	53.38	A	C
ATOM	1036	O	ALA	326	75.534	-20.730	-29.164	1.00	53.45	A	O
ATOM	1037	N	ILE	327	74.540	-21.870	-27.490	1.00	52.96	A	N
ATOM	1038	CA	ILE	327	74.058	-20.682	-26.796	1.00	52.95	A	C
ATOM	1039	CB	ILE	327	73.304	-21.044	-25.488	1.00	52.94	A	C
ATOM	1040	CG2	ILE	327	72.684	-22.429	-25.610	1.00	52.36	A	C
ATOM	1041	CG1	ILE	327	74.239	-20.989	-24.281	1.00	52.91	A	C
ATOM	1042	CD1	ILE	327	73.544	-21.210	-22.971	1.00	52.67	A	C
ATOM	1043	C	ILE	327	75.141	-19.633	-26.529	1.00	53.07	A	C
ATOM	1044	O	ILE	327	74.923	-18.445	-26.757	1.00	52.38	A	O
ATOM	1045	N	LYS	328	76.314	-20.084	-26.093	1.00	53.40	A	N
ATOM	1046	CA	LYS	328	77.437	-19.197	-25.804	1.00	54.34	A	C
ATOM	1047	CB	LYS	328	78.705	-20.037	-25.545	1.00	55.60	A	C
ATOM	1048	CG	LYS	328	79.962	-19.650	-26.354	1.00	57.53	A	C
ATOM	1049	CD	LYS	328	80.666	-18.405	-25.802	1.00	59.08	A	C
ATOM	1050	CE	LYS	328	81.507	-17.703	-26.869	1.00	59.85	A	C
ATOM	1051	NZ	LYS	328	80.655	-16.963	-27.854	1.00	61.17	A	N
ATOM	1052	C	LYS	328	77.656	-18.224	-26.959	1.00	54.24	A	C
ATOM	1053	O	LYS	328	77.556	-17.009	-26.786	1.00	53.74	A	O
ATOM	1054	N	GLU	329	77.922	-18.781	-28.138	1.00	54.62	A	N
ATOM	1055	CA	GLU	329	78.167	-17.994	-29.333	1.00	55.22	A	C
ATOM	1056	CB	GLU	329	78.610	-18.886	-30.486	1.00	56.84	A	C
ATOM	1057	CG	GLU	329	79.219	-20.215	-30.065	1.00	58.35	A	C
ATOM	1058	CD	GLU	329	78.565	-21.398	-30.773	1.00	59.18	A	C
ATOM	1059	OE1	GLU	329	77.334	-21.361	-30.994	1.00	59.64	A	O
ATOM	1060	OE2	GLU	329	79.279	-22.366	-31.110	1.00	59.22	A	O
ATOM	1061	C	GLU	329	76.874	-17.311	-29.707	1.00	54.87	A	C
ATOM	1062	O	GLU	329	76.873	-16.162	-30.143	1.00	55.29	A	O
ATOM	1063	N	GLU	330	75.771	-18.029	-29.539	1.00	53.68	A	N
ATOM	1064	CA	GLU	330	74.464	-17.484	-29.843	1.00	52.87	A	C
ATOM	1065	CB	GLU	330	73.399	-18.513	-29.509	1.00	53.15	A	C
ATOM	1066	CG	GLU	330	72.242	-18.004	-28.699	1.00	54.32	A	C
ATOM	1067	CD	GLU	330	71.533	-19.127	-27.985	1.00	55.63	A	C
ATOM	1068	OE1	GLU	330	71.244	-18.971	-26.776	1.00	55.78	A	O
ATOM	1069	OE2	GLU	330	71.294	-20.181	-28.624	1.00	55.44	A	O
ATOM	1070	C	GLU	330	74.271	-16.214	-29.026	1.00	52.03	A	C
ATOM	1071	O	GLU	330	73.935	-15.153	-29.561	1.00	52.48	A	O
ATOM	1072	N	ASN	331	74.549	-16.310	-27.735	1.00	50.59	A	N
ATOM	1073	CA	ASN	331	74.414	-15.162	-26.860	1.00	49.33	A	C
ATOM	1074	CB	ASN	331	74.647	-15.579	-25.409	1.00	50.17	A	C



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ATOM	1075	CG	ASN	331	73.572	-16.543	-24.914	1.00	51.86	A	C
ATOM	1076	OD1	ASN	331	73.700	-17.166	-23.851	1.00	53.08	A	O
ATOM	1077	ND2	ASN	331	72.503	-16.680	-25.702	1.00	52.28	A	N
ATOM	1078	C	ASN	331	75.363	-14.061	-27.302	1.00	47.39	A	C
ATOM	1079	O	ASN	331	75.034	-12.881	-27.239	1.00	46.78	A	O
ATOM	1080	N	ALA	332	76.505	-14.460	-27.840	1.00	45.80	A	N
ATOM	1081	CA	ALA	332	77.477	-13.496	-28.311	1.00	44.58	A	C
ATOM	1082	CB	ALA	332	78.770	-14.201	-28.733	1.00	44.58	A	C
ATOM	1083	C	ALA	332	76.876	-12.721	-29.478	1.00	43.76	A	C
ATOM	1084	O	ALA	332	77.005	-11.500	-29.547	1.00	43.54	A	O
ATOM	1085	N	ALA	333	76.154	-13.428	-30.345	1.00	42.90	A	N
ATOM	1086	CA	ALA	333	75.527	-12.817	-31.521	1.00	42.83	A	C
ATOM	1087	CB	ALA	333	74.600	-13.821	-32.202	1.00	42.55	A	C
ATOM	1088	C	ALA	333	74.749	-11.560	-31.143	1.00	42.95	A	C
ATOM	1089	O	ALA	333	74.891	-10.495	-31.765	1.00	42.85	A	O
ATOM	1090	N	LEU	334	73.955	-11.702	-30.089	1.00	43.05	A	N
ATOM	1091	CA	LEU	334	73.129	-10.628	-29.552	1.00	42.91	A	C
ATOM	1092	CB	LEU	334	72.635	-11.050	-28.176	1.00	42.84	A	C
ATOM	1093	CG	LEU	334	72.059	-9.944	-27.306	1.00	43.42	A	C
ATOM	1094	CD1	LEU	334	70.761	-9.437	-27.904	1.00	43.13	A	C
ATOM	1095	CD2	LEU	334	71.844	-10.496	-25.909	1.00	44.00	A	C
ATOM	1096	C	LEU	334	73.854	-9.280	-29.440	1.00	42.76	A	C
ATOM	1097	O	LEU	334	73.348	-8.244	-29.892	1.00	41.87	A	O
ATOM	1098	N	LEU	335	75.026	-9.316	-28.815	1.00	43.19	A	N
ATOM	1099	CA	LEU	335	75.843	-8.136	-28.609	1.00	44.88	A	C
ATOM	1100	CB	LEU	335	77.217	-8.537	-28.102	1.00	46.13	A	C
ATOM	1101	CG	LEU	335	77.221	-9.650	-27.069	1.00	47.99	A	C
ATOM	1102	CD1	LEU	335	78.626	-10.229	-26.933	1.00	49.11	A	C
ATOM	1103	CD2	LEU	335	76.699	-9.108	-25.750	1.00	49.50	A	C
ATOM	1104	C	LEU	335	76.051	-7.388	-29.899	1.00	45.78	A	C
ATOM	1105	O	LEU	335	75.606	-6.263	-30.058	1.00	45.90	A	O
ATOM	1106	N	LYS	336	76.711	-8.041	-30.838	1.00	46.50	A	N
ATOM	1107	CA	LYS	336	77.026	-7.422	-32.107	1.00	47.21	A	C
ATOM	1108	CB	LYS	336	77.538	-8.474	-33.083	1.00	47.91	A	C
ATOM	1109	CG	LYS	336	79.056	-8.682	-33.010	1.00	48.01	A	C
ATOM	1110	CD	LYS	336	79.623	-8.641	-31.578	1.00	48.34	A	C
ATOM	1111	CE	LYS	336	79.131	-9.789	-30.689	1.00	48.42	A	C
ATOM	1112	NZ	LYS	336	79.486	-11.170	-31.165	1.00	47.45	A	N
ATOM	1113	C	LYS	336	75.915	-6.586	-32.713	1.00	47.85	A	C
ATOM	1114	O	LYS	336	76.173	-5.513	-33.273	1.00	48.13	A	O
ATOM	1115	N	GLU	337	74.676	-7.021	-32.520	1.00	48.34	A	N
ATOM	1116	CA	GLU	337	73.545	-6.285	-33.070	1.00	49.05	A	C
ATOM	1117	CB	GLU	337	72.619	-7.244	-33.840	1.00	50.66	A	C
ATOM	1118	CG	GLU	337	71.524	-6.579	-34.679	1.00	51.61	A	C
ATOM	1119	CD	GLU	337	70.139	-6.754	-34.073	1.00	52.50	A	C
ATOM	1120	OE1	GLU	337	69.196	-6.064	-34.521	1.00	52.72	A	O
ATOM	1121	OE2	GLU	337	69.991	-7.591	-33.153	1.00	52.69	A	O
ATOM	1122	C	GLU	337	72.790	-5.524	-31.985	1.00	48.44	A	C
ATOM	1123	O	GLU	337	71.926	-4.697	-32.279	1.00	48.11	A	O
ATOM	1124	N	TYR	338	73.158	-5.760	-30.732	1.00	48.12	A	N
ATOM	1125	CA	TYR	338	72.491	-5.085	-29.633	1.00	48.07	A	C
ATOM	1126	CB	TYR	338	71.509	-6.036	-28.951	1.00	49.34	A	C
ATOM	1127	CG	TYR	338	70.182	-6.082	-29.661	1.00	50.86	A	C
ATOM	1128	CD1	TYR	338	69.536	-4.902	-30.033	1.00	50.64	A	C
ATOM	1129	CE1	TYR	338	68.349	-4.930	-30.733	1.00	50.86	A	C
ATOM	1130	CD2	TYR	338	69.593	-7.295	-30.008	1.00	51.20	A	C
ATOM	1131	CE2	TYR	338	68.394	-7.333	-30.710	1.00	51.55	A	C
ATOM	1132	CZ	TYR	338	67.783	-6.145	-31.073	1.00	51.60	A	C
ATOM	1133	OH	TYR	338	66.622	-6.170	-31.804	1.00	52.59	A	O
ATOM	1134	C	TYR	338	73.363	-4.413	-28.588	1.00	46.79	A	C
ATOM	1135	O	TYR	338	72.840	-3.702	-27.731	1.00	46.80	A	O
ATOM	1136	N	GLY	339	74.680	-4.585	-28.690	1.00	45.43	A	N

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ATOM	1137	CA	GLY	339	75.593	-4.007	-27.717	1.00	43.36	A	C
ATOM	1138	C	GLY	339	76.482	-2.851	-28.137	1.00	42.03	A	C
ATOM	1139	O	GLY	339	77.386	-2.465	-27.387	1.00	41.89	A	O
ATOM	1140	N	PHE	340	76.259	-2.291	-29.322	1.00	40.63	A	N
ATOM	1141	CA	PHE	340	77.097	-1.183	-29.756	1.00	39.34	A	C
ATOM	1142	CB	PHE	340	78.299	-1.675	-30.566	1.00	40.25	A	C
ATOM	1143	CG	PHE	340	79.008	-2.852	-29.964	1.00	41.06	A	C
ATOM	1144	CD1	PHE	340	78.528	-4.147	-30.166	1.00	41.84	A	C
ATOM	1145	CD2	PHE	340	80.143	-2.670	-29.183	1.00	41.21	A	C
ATOM	1146	CE1	PHE	340	79.168	-5.243	-29.591	1.00	42.48	A	C
ATOM	1147	CE2	PHE	340	80.792	-3.759	-28.606	1.00	41.68	A	C
ATOM	1148	CZ	PHE	340	80.304	-5.047	-28.809	1.00	42.05	A	C
ATOM	1149	C	PHE	340	76.352	-0.160	-30.581	1.00	38.14	A	C
ATOM	1150	O	PHE	340	76.108	-0.354	-31.775	1.00	38.20	A	O
ATOM	1151	N	CYS	341	76.023	0.952	-29.950	1.00	36.92	A	N
ATOM	1152	CA	CYS	341	75.341	2.019	-30.640	1.00	36.53	A	C
ATOM	1153	CB	CYS	341	74.882	3.072	-29.654	1.00	37.73	A	C
ATOM	1154	SG	CYS	341	76.230	4.226	-29.266	1.00	39.20	A	S
ATOM	1155	C	CYS	341	76.361	2.692	-31.538	1.00	35.93	A	C
ATOM	1156	O	CYS	341	77.513	2.256	-31.667	1.00	35.43	A	O
ATOM	1157	N	ILE	342	75.939	3.819	-32.089	1.00	35.77	A	N
ATOM	1158	CA	ILE	342	76.788	4.602	-32.957	1.00	35.70	A	C
ATOM	1159	CB	ILE	342	76.425	4.415	-34.435	1.00	35.30	A	C
ATOM	1160	CG2	ILE	342	77.307	5.299	-35.296	1.00	34.16	A	C
ATOM	1161	CG1	ILE	342	76.591	2.943	-34.840	1.00	36.17	A	C
ATOM	1162	CD1	ILE	342	75.375	2.038	-34.535	1.00	37.69	A	C
ATOM	1163	C	ILE	342	76.685	6.074	-32.582	1.00	36.24	A	C
ATOM	1164	O	ILE	342	75.665	6.727	-32.811	1.00	35.05	A	O
ATOM	1165	N	MET	343	77.751	6.575	-31.969	1.00	37.30	A	N
ATOM	1166	CA	MET	343	77.811	7.962	-31.555	1.00	37.67	A	C
ATOM	1167	CB	MET	343	78.060	8.053	-30.044	1.00	37.84	A	C
ATOM	1168	CG	MET	343	77.858	9.448	-29.438	1.00	37.64	A	C
ATOM	1169	SD	MET	343	78.108	9.546	-27.622	1.00	38.00	A	S
ATOM	1170	CE	MET	343	76.549	8.912	-27.033	1.00	37.58	A	C
ATOM	1171	C	MET	343	78.922	8.656	-32.330	1.00	38.55	A	C
ATOM	1172	O	MET	343	79.893	8.018	-32.737	1.00	37.40	A	O
ATOM	1173	N	ASP	344	78.694	9.941	-32.601	1.00	40.44	A	N
ATOM	1174	CA	ASP	344	79.601	10.849	-33.306	1.00	42.52	A	C
ATOM	1175	CB	ASP	344	80.519	11.563	-32.320	1.00	42.23	A	C
ATOM	1176	CG	ASP	344	79.805	12.659	-31.562	1.00	42.57	A	C
ATOM	1177	OD1	ASP	344	78.918	13.314	-32.162	1.00	41.91	A	O
ATOM	1178	OD2	ASP	344	80.127	12.860	-30.367	1.00	42.64	A	O
ATOM	1179	C	ASP	344	80.428	10.375	-34.474	1.00	44.45	A	C
ATOM	1180	O	ASP	344	80.468	11.035	-35.516	1.00	45.69	A	O
ATOM	1181	N	ASN	345	81.130	9.267	-34.296	1.00	46.20	A	N
ATOM	1182	CA	ASN	345	81.969	8.768	-35.360	1.00	47.27	A	C
ATOM	1183	CB	ASN	345	83.137	9.739	-35.539	1.00	49.07	A	C
ATOM	1184	CG	ASN	345	83.748	9.664	-36.913	1.00	50.89	A	C
ATOM	1185	OD1	ASN	345	83.054	9.825	-37.926	1.00	51.39	A	O
ATOM	1186	ND2	ASN	345	85.059	9.424	-36.964	1.00	52.12	A	N
ATOM	1187	C	ASN	345	82.512	7.403	-35.006	1.00	47.15	A	C
ATOM	1188	O	ASN	345	83.305	6.834	-35.755	1.00	47.38	A	O
ATOM	1189	N	HIS	346	82.092	6.867	-33.868	1.00	46.91	A	N
ATOM	1190	CA	HIS	346	82.620	5.586	-33.441	1.00	47.21	A	C
ATOM	1191	CB	HIS	346	83.774	5.823	-32.460	1.00	47.22	A	C
ATOM	1192	CG	HIS	346	84.693	6.932	-32.881	1.00	46.85	A	C
ATOM	1193	CD2	HIS	346	84.562	8.279	-32.790	1.00	46.79	A	C
ATOM	1194	ND1	HIS	346	85.866	6.709	-33.571	1.00	46.78	A	N
ATOM	1195	CE1	HIS	346	86.410	7.869	-33.895	1.00	46.81	A	C
ATOM	1196	NE2	HIS	346	85.639	8.838	-33.433	1.00	46.51	A	N
ATOM	1197	C	HIS	346	81.570	4.683	-32.834	1.00	47.28	A	C
ATOM	1198	O	HIS	346	80.523	5.144	-32.377	1.00	47.79	A	O

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ATOM	1199	N	LYS	347	81.859	3.386	-32.868	1.00	47.68	A	N
ATOM	1200	CA	LYS	347	80.975	2.346	-32.346	1.00	48.33	A	C
ATOM	1201	CB	LYS	347	80.997	1.143	-33.303	1.00	48.88	A	C
ATOM	1202	CG	LYS	347	80.243	-0.097	-32.834	1.00	50.05	A	C
ATOM	1203	CD	LYS	347	80.546	-1.279	-33.757	1.00	49.98	A	C
ATOM	1204	CE	LYS	347	79.891	-2.593	-33.302	1.00	49.88	A	C
ATOM	1205	NZ	LYS	347	78.394	-2.617	-33.439	1.00	49.20	A	N
ATOM	1206	C	LYS	347	81.456	1.922	-30.961	1.00	48.22	A	C
ATOM	1207	O	LYS	347	82.450	1.203	-30.840	1.00	48.48	A	O
ATOM	1208	N	GLU	348	80.768	2.373	-29.915	1.00	48.09	A	N
ATOM	1209	CA	GLU	348	81.171	2.013	-28.555	1.00	46.91	A	C
ATOM	1210	CB	GLU	348	81.318	3.257	-27.676	1.00	46.81	A	C
ATOM	1211	CG	GLU	348	82.225	4.316	-28.298	1.00	47.60	A	C
ATOM	1212	CD	GLU	348	82.846	5.248	-27.278	1.00	47.99	A	C
ATOM	1213	OE1	GLU	348	84.020	5.017	-26.906	1.00	48.56	A	O
ATOM	1214	OE2	GLU	348	82.170	6.211	-26.852	1.00	48.25	A	O
ATOM	1215	C	GLU	348	80.215	1.017	-27.929	1.00	45.86	A	C
ATOM	1216	O	GLU	348	79.103	0.821	-28.421	1.00	46.14	A	O
ATOM	1217	N	ARG	349	80.674	0.346	-26.880	1.00	44.92	A	N
ATOM	1218	CA	ARG	349	79.843	-0.639	-26.216	1.00	44.28	A	C
ATOM	1219	CB	ARG	349	80.695	-1.729	-25.561	1.00	45.13	A	C
ATOM	1220	CG	ARG	349	79.875	-2.794	-24.829	1.00	47.01	A	C
ATOM	1221	CD	ARG	349	80.718	-4.001	-24.406	1.00	48.60	A	C
ATOM	1222	NE	ARG	349	80.952	-4.941	-25.507	1.00	49.73	A	N
ATOM	1223	CZ	ARG	349	82.082	-5.626	-25.695	1.00	50.44	A	C
ATOM	1224	NH1	ARG	349	83.109	-5.487	-24.855	1.00	50.39	A	N
ATOM	1225	NH2	ARG	349	82.186	-6.459	-26.728	1.00	50.43	A	N
ATOM	1226	C	ARG	349	78.960	0.028	-25.189	1.00	43.55	A	C
ATOM	1227	O	ARG	349	79.350	1.002	-24.552	1.00	44.01	A	O
ATOM	1228	N	ILE	350	77.744	-0.480	-25.071	1.00	42.43	A	N
ATOM	1229	CA	ILE	350	76.766	0.036	-24.123	1.00	40.72	A	C
ATOM	1230	CB	ILE	350	75.312	-0.216	-24.674	1.00	40.39	A	C
ATOM	1231	CG2	ILE	350	74.333	-0.624	-23.584	1.00	39.78	A	C
ATOM	1232	CG1	ILE	350	74.804	1.018	-25.410	1.00	39.46	A	C
ATOM	1233	CD1	ILE	350	75.604	1.374	-26.624	1.00	40.74	A	C
ATOM	1234	C	ILE	350	76.963	-0.645	-22.768	1.00	40.17	A	C
ATOM	1235	O	ILE	350	77.640	-1.673	-22.663	1.00	39.60	A	O
ATOM	1236	N	ALA	351	76.416	-0.027	-21.729	1.00	39.65	A	N
ATOM	1237	CA	ALA	351	76.468	-0.577	-20.387	1.00	39.73	A	C
ATOM	1238	CB	ALA	351	75.809	0.373	-19.428	1.00	40.73	A	C
ATOM	1239	C	ALA	351	75.722	-1.912	-20.396	1.00	39.99	A	C
ATOM	1240	O	ALA	351	76.315	-2.956	-20.128	1.00	40.36	A	O
ATOM	1241	N	ASN	352	74.424	-1.871	-20.707	1.00	39.79	A	N
ATOM	1242	CA	ASN	352	73.593	-3.084	-20.783	1.00	39.38	A	C
ATOM	1243	CB	ASN	352	73.270	-3.626	-19.390	1.00	39.92	A	C
ATOM	1244	CG	ASN	352	72.572	-2.608	-18.523	1.00	41.19	A	C
ATOM	1245	OD1	ASN	352	72.735	-1.396	-18.709	1.00	41.21	A	
ATOM	1246	ND2	ASN	352	71.777	-3.090	-17.572	1.00	42.38	A	
ATOM	1247	C	ASN	352	72.299	-2.863	-21.568	1.00	38.11	A	C
ATOM	1248	O	ASN	352	71.453	-2.056	-21.189	1.00	38.23	A	O
ATOM	1249	N	PHE	353	72.160	-3.583	-22.674	1.00	36.96	A	N
ATOM	1250	CA	PHE	353	70.981	-3.458	-23.515	1.00	36.64	A	C
ATOM	1251	CB	PHE	353	71.286	-3.950	-24.932	1.00	37.52	A	C
ATOM	1252	CG	PHE	353	72.161	-5.158	-24.966	1.00	38.64	A	C
ATOM	1253	CD1	PHE	353	71.718	-6.365	-24.450	1.00	39.44	A	C
ATOM	1254	CD2	PHE	353	73.445	-5.080	-25.470	1.00	39.95	A	C
ATOM	1255	CE1	PHE	353	72.542	-7.473	-24.434	1.00	40.33	A	C
ATOM	1256	CE2	PHE	353	74.282	-6.176	-25.464	1.00	40.27	A	C
ATOM	1257	CZ	PHE	353	73.831	-7.378	-24.943	1.00	40.77	A	C
ATOM	1258	C	PHE	353	69.835	-4.249	-22.926	1.00	35.52	A	C
ATOM	1259	O	PHE	353	68.664	-3.936	-23.153	1.00	35.39	A	O
ATOM	1260	N	LYS	354	70.172	-5.279	-22.167	1.00	34.16	A	N

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ATOM	1261	CA	LYS	354	69.138	-6.092	-21.569	1.00	33.39	A	C
ATOM	1262	CB	LYS	354	69.711	-7.431	-21.113	1.00	35.50	A	C
ATOM	1263	CG	LYS	354	70.145	-8.309	-22.289	1.00	37.76	A	C
ATOM	1264	CD	LYS	354	70.641	-9.687	-21.857	1.00	40.20	A	C
ATOM	1265	CE	LYS	354	71.927	-9.612	-21.052	1.00	41.77	A	C
ATOM	1266	NZ	LYS	354	72.418	-10.979	-20.727	1.00	43.00	A	N
ATOM	1267	C	LYS	354	68.420	-5.356	-20.442	1.00	31.19	A	C
ATOM	1268	O	LYS	354	69.011	-5.014	-19.414	1.00	30.81	A	O
ATOM	1269	N	ILE	355	67.147	-5.068	-20.682	1.00	28.79	A	N
ATOM	1270	CA	ILE	355	66.317	-4.367	-19.716	1.00	26.49	A	C
ATOM	1271	CB	ILE	355	64.929	-4.087	-20.269	1.00	25.31	A	C
ATOM	1272	CG2	ILE	355	64.007	-3.555	-19.160	1.00	24.06	A	C
ATOM	1273	CG1	ILE	355	65.043	-3.116	-21.439	1.00	24.21	A	C
ATOM	1274	CD1	ILE	355	63.751	-2.914	-22.181	1.00	24.54	A	C
ATOM	1275	C	ILE	355	66.133	-5.138	-18.435	1.00	25.94	A	C
ATOM	1276	O	ILE	355	65.932	-6.352	-18.447	1.00	26.63	A	O
ATOM	1277	N	GLU	356	66.137	-4.391	-17.340	1.00	24.46	A	N
ATOM	1278	CA	GLU	356	65.967	-4.927	-16.009	1.00	23.13	A	C
ATOM	1279	CB	GLU	356	65.809	-3.764	-15.052	1.00	23.43	A	C
ATOM	1280	CG	GLU	356	66.257	-3.988	-13.643	1.00	23.89	A	C
ATOM	1281	CD	GLU	356	66.615	-2.659	-13.001	1.00	24.75	A	C
ATOM	1282	OE1	GLU	356	65.925	-2.224	-12.042	1.00	23.61	A	O
ATOM	1283	OE2	GLU	356	67.578	-2.031	-13.505	1.00	24.76	A	O
ATOM	1284	C	GLU	356	64.720	-5.804	-15.992	1.00	22.62	A	C
ATOM	1285	O	GLU	356	63.610	-5.365	-16.327	1.00	22.33	A	O
ATOM	1286	N	PRO	357	64.914	-7.093	-15.696	1.00	21.72	A	N
ATOM	1287	CD	PRO	357	66.235	-7.720	-15.519	1.00	20.91	A	C
ATOM	1288	CA	PRO	357	63.841	-8.089	-15.631	1.00	21.29	A	C
ATOM	1289	CB	PRO	357	64.610	-9.399	-15.445	1.00	20.93	A	C
ATOM	1290	CG	PRO	357	65.987	-9.099	-16.033	1.00	20.64	A	C
ATOM	1291	C	PRO	357	62.949	-7.839	-14.425	1.00	20.84	A	C
ATOM	1292	O	PRO	357	63.419	-7.362	-13.387	1.00	21.63	A	O
ATOM	1293	N	PRO	358	61.649	-8.150	-14.541	1.00	19.99	A	N
ATOM	1294	CD	PRO	358	60.968	-8.804	-15.669	1.00	19.33	A	C
ATOM	1295	CA	PRO	358	60.722	-7.949	-13.418	1.00	19.84	A	C
ATOM	1296	CB	PRO	358	59.404	-8.497	-13.964	1.00	18.97	A	C
ATOM	1297	CG	PRO	358	59.851	-9.542	-14.960	1.00	18.97	A	C
ATOM	1298	C	PRO	358	61.186	-8.793	-12.242	1.00	20.45	A	C
ATOM	1299	O	PRO	358	61.966	-9.736	-12.412	1.00	20.53	A	O
ATOM	1300	N	GLY	359	60.711	-8.476	-11.051	1.00	21.46	A	N
ATOM	1301	CA	GLY	359	61.133	-9.280	-9.926	1.00	23.02	A	C
ATOM	1302	C	GLY	359	60.708	-8.743	-8.591	1.00	24.33	A	C
ATOM	1303	O	GLY	359	59.701	-8.045	-8.462	1.00	24.44	A	O
ATOM	1304	N	LEU	360	61.493	-9.097	-7.585	1.00	25.78	A	N
ATOM	1305	CA	LEU	360	61.245	-8.669	-6.218	1.00	26.61	A	C
ATOM	1306	CB	LEU	360	61.057	-9.889	-5.327	1.00	25.91	A	C
ATOM	1307	CG	LEU	360	59.707	-10.514	-5.648	1.00	25.12	A	C
ATOM	1308	CD1	LEU	360	59.499	-11.817	-4.889	1.00	25.23	A	C
ATOM	1309	CD2	LEU	360	58.654	-9.482	-5.292	1.00	24.40	A	C
ATOM	1310	C	LEU	360	62.384	-7.789	-5.726	1.00	27.22	A	C
ATOM	1311	O	LEU	360	63.504	-8.263	-5.487	1.00	26.31	A	O
ATOM	1312	N	PHE	361	62.079	-6.498	-5.613	1.00	28.43	A	N
ATOM	1313	CA	PHE	361	63.040	-5.492	-5.181	1.00	29.22	A	C
ATOM	1314	CB	PHE	361	62.356	-4.129	-5.049	1.00	27.85	A	C
ATOM	1315	CG	PHE	361	63.250	-3.046	-4.511	1.00	26.72	A	C
ATOM	1316	CD1	PHE	361	62.837	-2.266	-3.431	1.00	25.66	A	C
ATOM	1317	CD2	PHE	361	64.504	-2.803	-5.086	1.00	26.80	A	C
ATOM	1318	CE1	PHE	361	63.648	-1.265	-2.930	1.00	25.24	A	C
ATOM	1319	CE2	PHE	361	65.332	-1.795	-4.589	1.00	25.92	A	C
ATOM	1320	CZ	PHE	361	64.904	-1.026	-3.511	1.00	26.44	A	C
ATOM	1321	C	PHE	361	63.756	-5.851	-3.886	1.00	30.46	A	C
ATOM	1322	O	PHE	361	63.127	-6.051	-2.831	1.00	30.18	A	O

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ATOM	1323	N	ARG	362	65.079	-5.940	-4.001	1.00	31.92	A	N
ATOM	1324	CA	ARG	362	65.953	-6.260	-2.881	1.00	33.45	A	C
ATOM	1325	CB	ARG	362	67.096	-7.158	-3.352	1.00	32.77	A	C
ATOM	1326	CG	ARG	362	66.876	-7.768	-4.729	1.00	33.55	A	C
ATOM	1327	CD	ARG	362	66.509	-9.240	-4.644	1.00	33.26	A	C
ATOM	1328	NE	ARG	362	67.670	-10.073	-4.342	1.00	32.97	A	N
ATOM	1329	CZ	ARG	362	67.771	-11.360	-4.664	1.00	33.13	A	C
ATOM	1330	NH1	ARG	362	66.779	-11.972	-5.297	1.00	33.00	A	N
ATOM	1331	NH2	ARG	362	68.879	-12.032	-4.380	1.00	34.16	A	N
ATOM	1332	C	ARG	362	66.510	-4.932	-2.366	1.00	35.08	A	C
ATOM	1333	O	ARG	362	67.222	-4.221	-3.082	1.00	35.33	A	O
ATOM	1334	N	GLY	363	66.146	-4.579	-1.138	1.00	36.26	A	N
ATOM	1335	CA	GLY	363	66.610	-3.328	-0.570	1.00	38.37	A	C
ATOM	1336	C	GLY	363	67.638	-3.503	0.524	1.00	40.06	A	C
ATOM	1337	O	GLY	363	67.368	-4.147	1.545	1.00	40.64	A	O
ATOM	1338	N	ARG	364	68.816	-2.921	0.308	1.00	41.45	A	N
ATOM	1339	CA	ARG	364	69.917	-2.987	1.272	1.00	42.07	A	C
ATOM	1340	CB	ARG	364	71.128	-2.186	0.765	1.00	43.54	A	C
ATOM	1341	CG	ARG	364	71.828	-2.790	-0.458	1.00	45.10	A	C
ATOM	1342	CD	ARG	364	72.803	-1.803	-1.115	1.00	47.57	A	C
ATOM	1343	NE	ARG	364	73.447	-2.374	-2.300	1.00	48.89	A	N
ATOM	1344	CZ	ARG	364	74.271	-1.717	-3.113	1.00	49.35	A	C
ATOM	1345	NH1	ARG	364	74.569	-0.442	-2.889	1.00	49.41	A	N
ATOM	1346	NH2	ARG	364	74.828	-2.353	-4.140	1.00	49.88	A	N
ATOM	1347	C	ARG	364	69.454	-2.433	2.609	1.00	42.07	A	C
ATOM	1348	O	ARG	364	68.723	-1.441	2.665	1.00	41.82	A	O
ATOM	1349	N	GLY	365	69.851	-3.091	3.687	1.00	41.74	A	N
ATOM	1350	CA	GLY	365	69.432	-2.619	4.989	1.00	42.40	A	C
ATOM	1351	C	GLY	365	67.927	-2.726	5.146	1.00	42.76	A	C
ATOM	1352	O	GLY	365	67.243	-3.279	4.282	1.00	43.17	A	O
ATOM	1353	N	ASN	366	67.402	-2.120	6.203	1.00	42.71	A	N
ATOM	1354	CA	ASN	366	65.979	-2.190	6.497	1.00	42.82	A	C
ATOM	1355	CB	ASN	366	65.747	-1.816	7.959	1.00	43.82	A	C
ATOM	1356	CG	ASN	366	66.638	-2.605	8.909	1.00	45.80	A	C
ATOM	1357	OD1	ASN	366	66.608	-2.399	10.130	1.00	47.62	A	O
ATOM	1358	ND2	ASN	366	67.446	-3.513	8.354	1.00	47.00	A	N
ATOM	1359	C	ASN	366	65.088	-1.365	5.582	1.00	42.98	A	C
ATOM	1360	O	ASN	366	64.299	-0.545	6.046	1.00	43.43	A	O
ATOM	1361	N	HIS	367	65.180	-1.615	4.280	1.00	42.59	A	N
ATOM	1362	CA	HIS	367	64.363	-0.875	3.329	1.00	41.58	A	C
ATOM	1363	CB	HIS	367	64.780	-1.169	1.890	1.00	42.30	A	C
ATOM	1364	CG	HIS	367	64.270	-0.162	0.905	1.00	43.42	A	C
ATOM	1365	CD2	HIS	367	63.156	0.608	0.915	1.00	43.72	A	C
ATOM	1366	ND1	HIS	367	64.962	0.181	-0.239	1.00	44.00	A	N
ATOM	1367	CE1	HIS	367	64.296	1.121	-0.888	1.00	43.94	A	C
ATOM	1368	NE2	HIS	367	63.196	1.396	-0.209	1.00	43.80	A	N
ATOM	1369	C	HIS	367	62.890	-1.214	3.518	1.00	40.00	A	C
ATOM	1370	O	HIS	367	62.500	-2.380	3.523	1.00	39.99	A	O
ATOM	1371	N	PRO	368	62.062	-0.188	3.744	1.00	38.38	A	N
ATOM	1372	CD	PRO	368	62.491	1.182	4.061	1.00	37.97	A	C
ATOM	1373	CA	PRO	368	60.615	-0.339	3.944	1.00	36.89	A	C
ATOM	1374	CB	PRO	368	60.189	1.060	4.388	1.00	36.70	A	C
ATOM	1375	CG	PRO	368	61.432	1.609	5.032	1.00	37.91	A	C
ATOM	1376	C	PRO	368	59.905	-0.755	2.648	1.00	35.71	A	C
ATOM	1377	O	PRO	368	58.720	-1.118	2.643	1.00	35.57	A	O
ATOM	1378	N	LYS	369	60.641	-0.715	1.549	1.00	34.06	A	N
ATOM	1379	CA	LYS	369	60.075	-1.087	0.271	1.00	33.02	A	C
ATOM	1380	CB	LYS	369	60.419	-0.010	-0.763	1.00	33.35	A	C
ATOM	1381	CG	LYS	369	59.239	0.493	-1.571	1.00	33.23	A	C
ATOM	1382	CD	LYS	369	58.954	1.965	-1.312	1.00	33.43	A	C
ATOM	1383	CE	LYS	369	57.766	2.446	-2.148	1.00	34.17	A	C
ATOM	1384	NZ	LYS	369	57.493	3.905	-1.974	1.00	34.41	A	N

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ATOM	1385	C	LYS	369	60.585	-2.465	-0.178	1.00	32.08	A	C
ATOM	1386	O	LYS	369	60.285	-2.908	-1.290	1.00	31.67	A	O
ATOM	1387	N	MET	370	61.333	-3.148	0.692	1.00	31.24	A	N
ATOM	1388	CA	MET	370	61.883	-4.470	0.354	1.00	30.61	A	C
ATOM	1389	CB	MET	370	62.976	-4.904	1.346	1.00	31.30	A	C
ATOM	1390	CG	MET	370	62.444	-5.339	2.714	1.00	32.53	A	C
ATOM	1391	SD	MET	370	63.610	-6.315	3.679	1.00	31.15	A	S
ATOM	1392	CE	MET	370	63.759	-5.263	5.120	1.00	33.21	A	C
ATOM	1393	C	MET	370	60.782	-5.520	0.321	1.00	29.33	A	C
ATOM	1394	O	MET	370	59.980	-5.626	1.254	1.00	29.42	A	O
ATOM	1395	N	GLY	371	60.752	-6.304	-0.748	1.00	27.88	A	N
ATOM	1396	CA	GLY	371	59.721	-7.315	-0.852	1.00	26.77	A	C
ATOM	1397	C	GLY	371	58.623	-6.961	-1.834	1.00	25.83	A	C
ATOM	1398	O	GLY	371	57.812	-7.824	-2.177	1.00	25.68	A	O
ATOM	1399	N	MET	372	58.524	-5.682	-2.199	1.00	25.45	A	N
ATOM	1400	CA	MET	372	57.534	-5.252	-3.184	1.00	24.77	A	C
ATOM	1401	CB	MET	372	57.426	-3.733	-3.259	1.00	23.81	A	C
ATOM	1402	CG	MET	372	56.520	-3.123	-2.214	1.00	24.81	A	C
ATOM	1403	SD	MET	372	56.519	-1.278	-2.212	1.00	25.48	A	S
ATOM	1404	CE	MET	372	55.983	-0.890	-3.956	1.00	26.48	A	C
ATOM	1405	C	MET	372	58.011	-5.796	-4.525	1.00	25.10	A	C
ATOM	1406	O	MET	372	59.219	-6.011	-4.744	1.00	24.05	A	O
ATOM	1407	N	LEU	373	57.056	-6.072	-5.403	1.00	25.43	A	N
ATOM	1408	CA	LEU	373	57.378	-6.615	-6.708	1.00	25.93	A	C
ATOM	1409	CB	LEU	373	56.128	-7.258	-7.320	1.00	24.82	A	C
ATOM	1410	CG	LEU	373	55.957	-7.267	-8.850	1.00	25.35	A	C
ATOM	1411	CD1	LEU	373	57.065	-8.066	-9.573	1.00	25.07	A	C
ATOM	1412	CD2	LEU	373	54.569	-7.814	-9.194	1.00	24.14	A	C
ATOM	1413	C	LEU	373	57.881	-5.517	-7.604	1.00	27.05	A	C
ATOM	1414	O	LEU	373	57.416	-4.391	-7.512	1.00	27.59	A	O
ATOM	1415	N	LYS	374	58.871	-5.826	-8.429	1.00	28.74	A	N
ATOM	1416	CA	LYS	374	59.354	-4.845	-9.380	1.00	30.83	A	C
ATOM	1417	CB	LYS	374	60.726	-5.225	-9.925	1.00	29.65	A	C
ATOM	1418	CG	LYS	374	61.801	-5.195	-8.867	1.00	27.48	A	C
ATOM	1419	CD	LYS	374	63.189	-5.396	-9.447	1.00	27.79	A	C
ATOM	1420	CE	LYS	374	63.662	-4.171	-10.217	1.00	27.24	A	C
ATOM	1421	NZ	LYS	374	65.105	-4.286	-10.591	1.00	26.60	A	N
ATOM	1422	C	LYS	374	58.283	-4.783	-10.486	1.00	34.01	A	C
ATOM	1423	O	LYS	374	57.167	-4.322	-10.211	1.00	35.37	A	O
ATOM	1424	N	ARG	375	58.578	-5.285	-11.692	1.00	36.12	A	N
ATOM	1425	CA	ARG	375	57.616	-5.259	-12.809	1.00	38.08	A	C
ATOM	1426	CB	ARG	375	56.819	-3.948	-12.818	1.00	42.59	A	C
ATOM	1427	CG	ARG	375	55.698	-3.876	-13.840	1.00	50.60	A	C
ATOM	1428	CD	ARG	375	56.149	-3.246	-15.160	1.00	56.94	A	C
ATOM	1429	NE	ARG	375	55.052	-3.117	-16.125	1.00	62.26	A	N
ATOM	1430	CZ	ARG	375	55.143	-2.447	-17.271	1.00	64.25	A	C
ATOM	1431	NH1	ARG	375	56.286	-1.848	-17.593	1.00	65.19	A	N
ATOM	1432	NH2	ARG	375	54.099	-2.386	-18.093	1.00	65.10	A	N
ATOM	1433	C	ARG	375	58.290	-5.426	-14.163	1.00	36.70	A	C
ATOM	1434	O	ARG	375	59.432	-5.012	-14.350	1.00	37.61	A	O
ATOM	1435	N	ARG	376	57.549	-5.981	-15.117	1.00	35.08	A	N
ATOM	1436	CA	ARG	376	58.050	-6.223	-16.466	1.00	34.60	A	C
ATOM	1437	CB	ARG	376	57.383	-7.469	-17.047	1.00	34.64	A	C
ATOM	1438	CG	ARG	376	57.832	-7.808	-18.453	1.00	33.97	A	C
ATOM	1439	CD	ARG	376	57.265	-9.143	-18.896	1.00	32.23	A	C
ATOM	1440	NE	ARG	376	57.892	-10.281	-18.221	1.00	30.43	A	N
ATOM	1441	CZ	ARG	376	58.914	-10.976	-18.718	1.00	29.55	A	C
ATOM	1442	NH1	ARG	376	59.436	-10.645	-19.896	1.00	28.55	A	N
ATOM	1443	NH2	ARG	376	59.379	-12.033	-18.058	1.00	29.18	A	N
ATOM	1444	C	ARG	376	57.799	-5.026	-17.372	1.00	34.39	A	C
ATOM	1445	O	ARG	376	56.667	-4.770	-17.769	1.00	34.70	A	O
ATOM	1446	N	ILE	377	58.871	-4.337	-17.744	1.00	34.04	A	N

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ATOM	1447	CA	ILE	377	58.783	-3.146	-18.584	1.00	32.92	A	C
ATOM	1448	CB	ILE	377	60.114	-2.364	-18.551	1.00	32.20	A	C
ATOM	1449	CG2	ILE	377	59.983	-1.067	-19.335	1.00	32.49	A	C
ATOM	1450	CG1	ILE	377	60.522	-2.087	-17.101	1.00	31.36	A	C
ATOM	1451	CD1	ILE	377	59.388	-1.524	-16.241	1.00	30.29	A	C
ATOM	1452	C	ILE	377	58.386	-3.392	-20.042	1.00	32.70	A	C
ATOM	1453	O	ILE	377	58.965	-4.246	-20.712	1.00	33.52	A	O
ATOM	1454	N	MET	378	57.414	-2.622	-20.527	1.00	31.50	A	N
ATOM	1455	CA	MET	378	56.937	-2.734	-21.911	1.00	30.35	A	C
ATOM	1456	CB	MET	378	55.411	-2.790	-21.941	1.00	31.66	A	C
ATOM	1457	CG	MET	378	54.829	-3.795	-20.964	1.00	33.72	A	C
ATOM	1458	SD	MET	378	55.509	-5.440	-21.218	1.00	36.30	A	S
ATOM	1459	CE	MET	378	54.154	-6.218	-22.109	1.00	34.84	A	C
ATOM	1460	C	MET	378	57.423	-1.559	-22.764	1.00	28.88	A	C
ATOM	1461	O	MET	378	57.879	-0.540	-22.241	1.00	29.11	A	O
ATOM	1462	N	PRO	379	57.359	-1.704	-24.095	1.00	27.53	A	N
ATOM	1463	CD	PRO	379	56.901	-2.915	-24.789	1.00	27.49	A	C
ATOM	1464	CA	PRO	379	57.781	-0.685	-25.066	1.00	26.72	A	C
ATOM	1465	CB	PRO	379	57.346	-1.289	-26.390	1.00	26.60	A	C
ATOM	1466	CG	PRO	379	57.522	-2.741	-26.151	1.00	26.71	A	C
ATOM	1467	C	PRO	379	57.025	0.596	-24.815	1.00	26.09	A	C
ATOM	1468	O	PRO	379	57.482	1.707	-25.127	1.00	26.04	A	O
ATOM	1469	N	GLU	380	55.844	0.407	-24.248	1.00	25.02	A	N
ATOM	1470	CA	GLU	380	54.965	1.500	-23.918	1.00	24.91	A	C
ATOM	1471	CB	GLU	380	53.570	0.961	-23.586	1.00	26.80	A	C
ATOM	1472	CG	GLU	380	52.782	0.460	-24.816	1.00	29.10	A	C
ATOM	1473	CD	GLU	380	53.528	-0.598	-25.640	1.00	30.98	A	C
ATOM	1474	OE1	GLU	380	54.101	-1.553	-25.052	1.00	31.94	A	O
ATOM	1475	OE2	GLU	380	53.535	-0.470	-26.880	1.00	30.75	A	O
ATOM	1476	C	GLU	380	55.558	2.229	-22.731	1.00	23.26	A	C
ATOM	1477	O	GLU	380	55.146	3.341	-22.402	1.00	23.67	A	O
ATOM	1478	N	ASP	381	56.529	1.598	-22.086	1.00	21.35	A	N
ATOM	1479	CA	ASP	381	57.181	2.213	-20.946	1.00	19.45	A	C
ATOM	1480	CB	ASP	381	57.360	1.200	-19.824	1.00	18.72	A	C
ATOM	1481	CG	ASP	381	56.071	0.543	-19.433	1.00	18.33	A	C
ATOM	1482	OD1	ASP	381	55.230	1.215	-18.800	1.00	18.76	A	O
ATOM	1483	OD2	ASP	381	55.894	-0.642	-19.770	1.00	17.70	A	O
ATOM	1484	C	ASP	381	58.544	2.735	-21.352	1.00	18.19	A	C
ATOM	1485	O	ASP	381	59.243	3.344	-20.547	1.00	18.58	A	O
ATOM	1486	N	ILE	382	58.913	2.562	-22.610	1.00	17.04	A	N
ATOM	1487	CA	ILE	382	60.234	3.005	-22.996	1.00	16.70	A	C
ATOM	1488	CB	ILE	382	60.972	1.878	-23.749	1.00	16.72	A	C
ATOM	1489	CG2	ILE	382	62.408	2.313	-24.105	1.00	16.33	A	C
ATOM	1490	CG1	ILE	382	61.003	0.614	-22.883	1.00	14.95	A	C
ATOM	1491	CD1	ILE	382	61.869	0.742	-21.660	1.00	12.19	A	C
ATOM	1492	C	ILE	382	60.380	4.329	-23.744	1.00	16.96	A	C
ATOM	1493	O	ILE	382	59.521	4.720	-24.533	1.00	17.97	A	O
ATOM	1494	N	ILE	383	61.482	5.019	-23.465	1.00	16.74	A	N
ATOM	1495	CA	ILE	383	61.795	6.265	-24.129	1.00	16.90	A	C
ATOM	1496	CB	ILE	383	61.856	7.453	-23.153	1.00	16.34	A	C
ATOM	1497	CG2	ILE	383	62.654	8.626	-23.773	1.00	14.08	A	C
ATOM	1498	CG1	ILE	383	60.428	7.854	-22.770	1.00	15.75	A	C
ATOM	1499	CD1	ILE	383	60.278	9.307	-22.320	1.00	15.37	A	C
ATOM	1500	C	ILE	383	63.115	6.130	-24.866	1.00	17.98	A	C
ATOM	1501	O	ILE	383	64.178	5.912	-24.266	1.00	18.61	A	O
ATOM	1502	N	ILE	384	63.040	6.254	-26.182	1.00	18.85	A	N
ATOM	1503	CA	ILE	384	64.232	6.153	-26.992	1.00	19.46	A	C
ATOM	1504	CB	ILE	384	63.932	5.604	-28.375	1.00	18.69	A	C
ATOM	1505	CG2	ILE	384	65.210	5.319	-29.081	1.00	18.28	A	C
ATOM	1506	CG1	ILE	384	63.108	4.315	-28.280	1.00	20.38	A	C
ATOM	1507	CD1	ILE	384	63.866	3.100	-27.759	1.00	20.41	A	C
ATOM	1508	C	ILE	384	64.826	7.526	-27.165	1.00	20.84	A	C

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ATOM	1509	O	ILE	384	64.108	8.504	-27.375	1.00	19.47	A	O
ATOM	1510	N	ASN	385	66.148	7.575	-27.052	1.00	24.31	A	N
ATOM	1511	CA	ASN	385	66.946	8.794	-27.206	1.00	27.80	A	C
ATOM	1512	CB	ASN	385	67.807	8.997	-25.944	1.00	29.12	A	C
ATOM	1513	CG	ASN	385	68.755	10.176	-26.060	1.00	30.67	A	C
ATOM	1514	OD1	ASN	385	68.359	11.344	-25.885	1.00	30.22	A	O
ATOM	1515	ND2	ASN	385	70.024	9.879	-26.359	1.00	30.47	A	N
ATOM	1516	C	ASN	385	67.822	8.583	-28.458	1.00	28.75	A	C
ATOM	1517	O	ASN	385	68.881	7.947	-28.396	1.00	27.90	A	O
ATOM	1518	N	CYS	386	67.388	9.128	-29.590	1.00	30.89	A	N
ATOM	1519	CA	CYS	386	68.127	8.911	-30.819	1.00	34.24	A	C
ATOM	1520	CB	CYS	386	67.181	8.446	-31.912	1.00	35.83	A	C
ATOM	1521	SG	CYS	386	67.964	8.446	-33.544	1.00	45.24	A	S
ATOM	1522	C	CYS	386	69.037	9.992	-31.370	1.00	34.59	A	C
ATOM	1523	O	CYS	386	70.198	10.070	-30.994	1.00	35.58	A	O
ATOM	1524	N	SER	387	68.527	10.696	-32.377	1.00	35.65	A	N
ATOM	1525	CA	SER	387	69.184	11.777	-33.117	1.00	37.37	A	C
ATOM	1526	CB	SER	387	70.701	11.550	-33.286	1.00	36.25	A	C
ATOM	1527	OG	SER	387	71.002	10.340	-33.964	1.00	33.66	A	O
ATOM	1528	C	SER	387	68.493	11.770	-34.484	1.00	39.37	A	C
ATOM	1529	O	SER	387	68.867	11.008	-35.379	1.00	38.93	A	O
ATOM	1530	N	LYS	388	67.444	12.580	-34.607	1.00	41.99	A	N
ATOM	1531	CA	LYS	388	66.660	12.680	-35.836	1.00	44.97	A	C
ATOM	1532	CB	LYS	388	65.702	13.883	-35.779	1.00	46.95	A	C
ATOM	1533	CG	LYS	388	64.234	13.547	-35.458	1.00	48.44	A	C
ATOM	1534	CD	LYS	388	63.375	14.820	-35.413	1.00	48.79	A	C
ATOM	1535	CE	LYS	388	62.042	14.619	-34.674	1.00	48.64	A	C
ATOM	1536	NZ	LYS	388	61.049	13.742	-35.373	1.00	48.28	A	N
ATOM	1537	C	LYS	388	67.512	12.757	-37.101	1.00	45.87	A	C
ATOM	1538	O	LYS	388	67.900	13.837	-37.545	1.00	46.61	A	O
ATOM	1539	N	ASP	389	67.790	11.585	-37.660	1.00	45.90	A	N
ATOM	1540	CA	ASP	389	68.580	11.416	-38.874	1.00	45.65	A	C
ATOM	1541	CB	ASP	389	69.777	12.354	-38.906	1.00	46.22	A	C
ATOM	1542	CG	ASP	389	70.710	12.127	-37.749	1.00	47.13	A	C
ATOM	1543	OD1	ASP	389	71.606	11.273	-37.868	1.00	48.58	A	O
ATOM	1544	OD2	ASP	389	70.531	12.788	-36.707	1.00	48.20	A	O
ATOM	1545	C	ASP	389	69.074	9.993	-38.784	1.00	45.18	A	C
ATOM	1546	O	ASP	389	69.292	9.322	-39.795	1.00	45.84	A	O
ATOM	1547	N	ALA	390	69.278	9.550	-37.552	1.00	44.26	A	N
ATOM	1548	CA	ALA	390	69.737	8.203	-37.312	1.00	43.92	A	C
ATOM	1549	CB	ALA	390	70.330	8.093	-35.924	1.00	44.03	A	C
ATOM	1550	C	ALA	390	68.566	7.246	-37.464	1.00	43.54	A	C
ATOM	1551	O	ALA	390	67.396	7.643	-37.355	1.00	43.07	A	O
ATOM	1552	N	LYS	391	68.895	5.996	-37.770	1.00	42.98	A	N
ATOM	1553	CA	LYS	391	67.900	4.946	-37.927	1.00	42.62	A	C
ATOM	1554	CB	LYS	391	68.524	3.705	-38.576	1.00	43.23	A	C
ATOM	1555	CG	LYS	391	68.594	3.735	-40.101	1.00	43.41	A	C
ATOM	1556	CD	LYS	391	67.413	2.999	-40.733	1.00	43.46	A	C
ATOM	1557	CE	LYS	391	67.695	2.644	-42.195	1.00	43.73	A	C
ATOM	1558	NZ	LYS	391	66.576	1.890	-42.846	1.00	43.27	A	N
ATOM	1559	C	LYS	391	67.317	4.585	-36.560	1.00	41.62	A	C
ATOM	1560	O	LYS	391	67.947	3.880	-35.752	1.00	41.44	A	O
ATOM	1561	N	VAL	392	66.117	5.094	-36.305	1.00	39.64	A	N
ATOM	1562	CA	VAL	392	65.424	4.844	-35.057	1.00	37.81	A	C
ATOM	1563	CB	VAL	392	64.169	5.692	-34.958	1.00	38.21	A	C
ATOM	1564	CG1	VAL	392	63.386	5.339	-33.690	1.00	38.19	A	C
ATOM	1565	CG2	VAL	392	64.539	7.156	-34.999	1.00	39.16	A	C
ATOM	1566	C	VAL	392	64.970	3.410	-34.940	1.00	36.73	A	C
ATOM	1567	O	VAL	392	64.342	2.872	-35.851	1.00	36.78	A	O
ATOM	1568	N	PRO	393	65.295	2.761	-33.820	1.00	35.39	A	N
ATOM	1569	CD	PRO	393	66.178	3.178	-32.724	1.00	34.66	A	C
ATOM	1570	CA	PRO	393	64.871	1.374	-33.641	1.00	35.28	A	C



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ATOM	1571	CB	PRO	393	65.444	1.011	-32.264	1.00	34.95	A	C
ATOM	1572	CG	PRO	393	65.663	2.329	-31.600	1.00	34.42	A	C
ATOM	1573	C	PRO	393	63.339	1.244	-33.693	1.00	34.86	A	C
ATOM	1574	O	PRO	393	62.600	2.034	-33.097	1.00	34.45	A	O
ATOM	1575	N	SER	394	62.892	0.298	-34.511	1.00	34.31	A	N
ATOM	1576	CA	SER	394	61.479	-0.003	-34.702	1.00	33.16	A	C
ATOM	1577	CB	SER	394	61.306	-0.788	-36.011	1.00	34.43	A	C
ATOM	1578	OG	SER	394	62.345	-1.757	-36.181	1.00	33.84	A	O
ATOM	1579	C	SER	394	60.992	-0.836	-33.522	1.00	31.56	A	C
ATOM	1580	O	SER	394	61.506	-1.925	-33.266	1.00	31.34	A	O
ATOM	1581	N	PRO	395	59.989	-0.340	-32.789	1.00	30.27	A	N
ATOM	1582	CD	PRO	395	59.185	0.856	-33.065	1.00	29.69	A	C
ATOM	1583	CA	PRO	395	59.461	-1.076	-31.632	1.00	30.46	A	C
ATOM	1584	CB	PRO	395	58.353	-0.159	-31.110	1.00	29.43	A	C
ATOM	1585	CG	PRO	395	57.897	0.538	-32.336	1.00	30.10	A	C
ATOM	1586	C	PRO	395	58.936	-2.460	-32.000	1.00	30.49	A	C
ATOM	1587	O	PRO	395	58.471	-2.681	-33.119	1.00	31.13	A	O
ATOM	1588	N	PRO	396	59.069	-3.425	-31.081	1.00	30.69	A	N
ATOM	1589	CD	PRO	396	59.816	-3.340	-29.818	1.00	31.00	A	C
ATOM	1590	CA	PRO	396	58.607	-4.794	-31.314	1.00	30.49	A	C
ATOM	1591	CB	PRO	396	58.971	-5.509	-30.021	1.00	30.98	A	C
ATOM	1592	CG	PRO	396	60.215	-4.785	-29.601	1.00	32.17	A	C
ATOM	1593	C	PRO	396	57.120	-4.867	-31.585	1.00	30.51	A	C
ATOM	1594	O	PRO	396	56.308	-4.235	-30.894	1.00	30.21	A	O
ATOM	1595	N	PRO	397	56.756	-5.635	-32.622	1.00	30.24	A	N
ATOM	1596	CD	PRO	397	57.774	-6.453	-33.308	1.00	29.83	A	C
ATOM	1597	CA	PRO	397	55.442	-5.939	-33.170	1.00	29.90	A	C
ATOM	1598	CB	PRO	397	55.576	-7.414	-33.482	1.00	30.03	A	C
ATOM	1599	CG	PRO	397	56.933	-7.433	-34.126	1.00	29.55	A	C
ATOM	1600	C	PRO	397	54.243	-5.644	-32.290	1.00	29.74	A	C
ATOM	1601	O	PRO	397	54.138	-6.125	-31.156	1.00	29.34	A	O
ATOM	1602	N	GLY	398	53.344	-4.842	-32.854	1.00	30.08	A	N
ATOM	1603	CA	GLY	398	52.122	-4.449	-32.182	1.00	30.42	A	C
ATOM	1604	C	GLY	398	52.343	-3.251	-31.295	1.00	30.61	A	C
ATOM	1605	O	GLY	398	51.666	-2.228	-31.429	1.00	31.27	A	O
ATOM	1606	N	HIS	399	53.321	-3.388	-30.407	1.00	30.34	A	N
ATOM	1607	CA	HIS	399	53.685	-2.354	-29.457	1.00	30.03	A	C
ATOM	1608	CB	HIS	399	54.745	-2.885	-28.513	1.00	29.06	A	C
ATOM	1609	CG	HIS	399	54.247	-3.939	-27.590	1.00	29.26	A	C
ATOM	1610	CD2	HIS	399	54.477	-5.271	-27.551	1.00	29.71	A	C
ATOM	1611	ND1	HIS	399	53.421	-3.657	-26.523	1.00	29.87	A	N
ATOM	1612	CE1	HIS	399	53.168	-4.772	-25.862	1.00	30.88	A	C
ATOM	1613	NE2	HIS	399	53.795	-5.768	-26.465	1.00	30.45	A	N
ATOM	1614	C	HIS	399	54.236	-1.091	-30.076	1.00	30.54	A	C
ATOM	1615	O	HIS	399	54.680	-1.071	-31.224	1.00	30.93	A	O
ATOM	1616	N	LYS	400	54.248	-0.049	-29.260	1.00	31.03	A	N
ATOM	1617	CA	LYS	400	54.787	1.242	-29.625	1.00	31.33	A	C
ATOM	1618	CB	LYS	400	53.663	2.251	-29.833	1.00	30.01	A	C
ATOM	1619	CG	LYS	400	52.670	2.287	-28.699	1.00	29.38	A	C
ATOM	1620	CD	LYS	400	51.903	3.608	-28.649	1.00	30.02	A	C
ATOM	1621	CE	LYS	400	50.892	3.774	-29.784	1.00	28.83	A	C
ATOM	1622	NZ	LYS	400	51.526	4.079	-31.094	1.00	28.56	A	N
ATOM	1623	C	LYS	400	55.671	1.688	-28.458	1.00	32.00	A	C
ATOM	1624	O	LYS	400	55.582	1.156	-27.341	1.00	31.85	A	O
ATOM	1625	N	TRP	401	56.575	2.615	-28.737	1.00	33.02	A	N
ATOM	1626	CA	TRP	401	57.428	3.142	-27.686	1.00	33.68	A	C
ATOM	1627	CB	TRP	401	58.596	3.942	-28.272	1.00	33.17	A	C
ATOM	1628	CG	TRP	401	59.591	3.109	-29.016	1.00	33.03	A	C
ATOM	1629	CD2	TRP	401	60.331	2.014	-28.495	1.00	32.57	A	C
ATOM	1630	CE2	TRP	401	61.148	1.528	-29.538	1.00	32.02	A	C
ATOM	1631	CE3	TRP	401	60.385	1.395	-27.246	1.00	33.46	A	C
ATOM	1632	CD1	TRP	401	59.973	3.245	-30.319	1.00	33.22	A	C

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ATOM	1633	NE1	TRP	401	60.911	2.297	-30.641	1.00	32.00	A	N
ATOM	1634	CZ2	TRP	401	62.006	0.456	-29.371	1.00	33.10	A	C
ATOM	1635	CZ3	TRP	401	61.239	0.327	-27.077	1.00	34.61	A	C
ATOM	1636	CH2	TRP	401	62.042	-0.134	-28.137	1.00	34.68	A	C
ATOM	1637	C	TRP	401	56.565	4.081	-26.859	1.00	33.75	A	C
ATOM	1638	O	TRP	401	55.457	4.458	-27.267	1.00	33.59	A	O
ATOM	1639	N	LYS	402	57.055	4.415	-25.676	1.00	33.55	A	N
ATOM	1640	CA	LYS	402	56.355	5.344	-24.814	1.00	33.50	A	C
ATOM	1641	CB	LYS	402	57.034	5.372	-23.437	1.00	35.67	A	C
ATOM	1642	CG	LYS	402	56.308	6.127	-22.326	1.00	39.09	A	C
ATOM	1643	CD	LYS	402	56.551	7.632	-22.370	1.00	42.41	A	C
ATOM	1644	CE	LYS	402	55.429	8.384	-23.109	1.00	44.51	A	C
ATOM	1645	NZ	LYS	402	55.756	9.838	-23.322	1.00	45.58	A	N
ATOM	1646	C	LYS	402	56.549	6.674	-25.531	1.00	31.55	A	C
ATOM	1647	O	LYS	402	55.609	7.296	-26.004	1.00	31.63	A	O
ATOM	1648	N	GLU	403	57.799	7.068	-25.664	1.00	29.41	A	N
ATOM	1649	CA	GLU	403	58.114	8.314	-26.312	1.00	28.60	A	C
ATOM	1650	CB	GLU	403	58.088	9.445	-25.285	1.00	29.37	A	C
ATOM	1651	CG	GLU	403	58.304	10.852	-25.842	1.00	31.33	A	C
ATOM	1652	CD	GLU	403	59.759	11.341	-25.772	1.00	32.51	A	C
ATOM	1653	OE1	GLU	403	60.665	10.517	-25.505	1.00	33.23	A	O
ATOM	1654	OE2	GLU	403	59.995	12.561	-25.987	1.00	32.84	A	O
ATOM	1655	C	GLU	403	59.499	8.171	-26.897	1.00	28.18	A	C
ATOM	1656	O	GLU	403	60.268	7.279	-26.509	1.00	28.48	A	O
ATOM	1657	N	VAL	404	59.804	9.027	-27.863	1.00	26.94	A	N
ATOM	1658	CA	VAL	404	61.102	9.002	-28.498	1.00	26.50	A	C
ATOM	1659	CB	VAL	404	61.067	8.238	-29.825	1.00	26.26	A	C
ATOM	1660	CG1	VAL	404	62.479	8.080	-30.362	1.00	26.57	A	C
ATOM	1661	CG2	VAL	404	60.410	6.881	-29.643	1.00	25.99	A	C
ATOM	1662	C	VAL	404	61.526	10.428	-28.764	1.00	26.66	A	C
ATOM	1663	O	VAL	404	60.790	11.205	-29.360	1.00	26.89	A	O
ATOM	1664	N	ARG	405	62.715	10.777	-28.306	1.00	26.81	A	N
ATOM	1665	CA	ARG	405	63.218	12.123	-28.499	1.00	26.98	A	C
ATOM	1666	CB	ARG	405	62.914	12.981	-27.281	1.00	26.45	A	C
ATOM	1667	CG	ARG	405	63.357	12.343	-25.984	1.00	25.90	A	C
ATOM	1668	CD	ARG	405	63.238	13.330	-24.854	1.00	26.31	A	C
ATOM	1669	NE	ARG	405	63.285	12.711	-23.534	1.00	27.12	A	N
ATOM	1670	CZ	ARG	405	62.214	12.305	-22.856	1.00	28.30	A	C
ATOM	1671	NH1	ARG	405	60.991	12.425	-23.361	1.00	28.72	A	N
ATOM	1672	NH2	ARG	405	62.358	11.860	-21.624	1.00	29.71	A	N
ATOM	1673	C	ARG	405	64.710	12.107	-28.757	1.00	27.98	A	C
ATOM	1674	O	ARG	405	65.357	11.053	-28.712	1.00	27.67	A	O
ATOM	1675	N	HIS	406	65.258	13.290	-29.010	1.00	29.50	A	N
ATOM	1676	CA	HIS	406	66.676	13.402	-29.309	1.00	31.50	A	C
ATOM	1677	CB	HIS	406	66.892	13.586	-30.816	1.00	32.03	A	C
ATOM	1678	CG	HIS	406	65.968	12.770	-31.662	1.00	32.46	A	C
ATOM	1679	CD2	HIS	406	64.811	13.098	-32.285	1.00	32.21	A	C
ATOM	1680	ND1	HIS	406	66.183	11.434	-31.927	1.00	33.07	A	N
ATOM	1681	CE1	HIS	406	65.198	10.975	-32.678	1.00	33.46	A	C
ATOM	1682	NE2	HIS	406	64.351	11.964	-32.909	1.00	33.03	A	N
ATOM	1683	C	HIS	406	67.283	14.567	-28.562	1.00	32.73	A	C
ATOM	1684	O	HIS	406	67.518	15.643	-29.124	1.00	32.89	A	O
ATOM	1685	N	ASP	407	67.507	14.367	-27.276	1.00	33.86	A	N
ATOM	1686	CA	ASP	407	68.106	15.421	-26.503	1.00	34.11	A	C
ATOM	1687	CB	ASP	407	67.472	15.522	-25.123	1.00	34.40	A	C
ATOM	1688	CG	ASP	407	67.864	16.789	-24.418	1.00	36.16	A	C
ATOM	1689	OD1	ASP	407	68.258	17.742	-25.128	1.00	36.48	A	O
ATOM	1690	OD2	ASP	407	67.785	16.836	-23.169	1.00	37.86	A	O
ATOM	1691	C	ASP	407	69.572	15.092	-26.394	1.00	34.30	A	C
ATOM	1692	O	ASP	407	69.977	14.334	-25.508	1.00	33.87	A	O
ATOM	1693	N	ASN	408	70.354	15.602	-27.347	1.00	34.33	A	N
ATOM	1694	CA	ASN	408	71.802	15.378	-27.356	1.00	34.28	A	C

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ATOM	1695	CB	ASN	408	72.409	15.830	-28.679	1.00	35.99	A	C
ATOM	1696	CG	ASN	408	72.217	17.313	-28.937	1.00	38.38	A	C
ATOM	1697	OD1	ASN	408	71.559	18.023	-28.163	1.00	39.39	A	O
ATOM	1698	ND2	ASN	408	72.795	17.794	-30.036	1.00	39.83	A	N
ATOM	1699	C	ASN	408	72.451	16.140	-26.205	1.00	33.58	A	C
ATOM	1700	O	ASN	408	73.667	16.309	-26.147	1.00	33.07	A	O
ATOM	1701	N	LYS	409	71.598	16.655	-25.332	1.00	33.37	A	N
ATOM	1702	CA	LYS	409	72.025	17.391	-24.170	1.00	33.96	A	C
ATOM	1703	CB	LYS	409	71.010	18.490	-23.859	1.00	36.22	A	C
ATOM	1704	CG	LYS	409	70.734	19.435	-25.043	1.00	38.66	A	C
ATOM	1705	CD	LYS	409	71.986	20.175	-25.490	1.00	39.60	A	C
ATOM	1706	CE	LYS	409	72.476	21.110	-24.399	1.00	39.20	A	C
ATOM	1707	NZ	LYS	409	73.797	21.723	-24.699	1.00	38.51	A	N
ATOM	1708	C	LYS	409	72.141	16.411	-23.004	1.00	33.49	A	C
ATOM	1709	O	LYS	409	72.269	16.822	-21.845	1.00	33.93	A	O
ATOM	1710	N	VAL	410	72.046	15.113	-23.307	1.00	32.00	A	N
ATOM	1711	CA	VAL	410	72.174	14.071	-22.286	1.00	29.55	A	C
ATOM	1712	CB	VAL	410	70.839	13.594	-21.711	1.00	29.05	A	C
ATOM	1713	CG1	VAL	410	70.956	13.528	-20.207	1.00	28.91	A	C
ATOM	1714	CG2	VAL	410	69.701	14.506	-22.122	1.00	29.56	A	C
ATOM	1715	C	VAL	410	72.919	12.858	-22.792	1.00	28.26	A	C
ATOM	1716	O	VAL	410	73.172	12.715	-23.986	1.00	28.11	A	O
ATOM	1717	N	THR	411	73.239	11.973	-21.859	1.00	27.06	A	N
ATOM	1718	CA	THR	411	73.995	10.757	-22.137	1.00	26.68	A	C
ATOM	1719	CB	THR	411	74.768	10.326	-20.854	1.00	27.01	A	C
ATOM	1720	OG1	THR	411	75.714	11.347	-20.494	1.00	27.45	A	O
ATOM	1721	CG2	THR	411	75.477	8.982	-21.041	1.00	27.67	A	C
ATOM	1722	C	THR	411	73.142	9.586	-22.653	1.00	26.08	A	C
ATOM	1723	O	THR	411	73.092	9.319	-23.847	1.00	26.07	A	O
ATOM	1724	N	TRP	412	72.499	8.882	-21.729	1.00	25.70	A	N
ATOM	1725	CA	TRP	412	71.644	7.724	-22.008	1.00	24.05	A	C
ATOM	1726	CB	TRP	412	70.560	7.661	-20.946	1.00	23.38	A	C
ATOM	1727	CG	TRP	412	69.674	8.842	-21.026	1.00	22.45	A	C
ATOM	1728	CD2	TRP	412	68.389	8.897	-21.640	1.00	23.27	A	C
ATOM	1729	CE2	TRP	412	67.893	10.207	-21.454	1.00	23.08	A	C
ATOM	1730	CE3	TRP	412	67.603	7.965	-22.327	1.00	23.85	A	C
ATOM	1731	CD1	TRP	412	69.915	10.085	-20.521	1.00	22.24	A	C
ATOM	1732	NE1	TRP	412	68.847	10.912	-20.769	1.00	22.81	A	N
ATOM	1733	CZ2	TRP	412	66.641	10.609	-21.926	1.00	23.40	A	C
ATOM	1734	CZ3	TRP	412	66.355	8.360	-22.801	1.00	25.04	A	C
ATOM	1735	CH2	TRP	412	65.886	9.676	-22.595	1.00	24.78	A	C
ATOM	1736	C	TRP	412	70.954	7.669	-23.368	1.00	23.60	A	C
ATOM	1737	O	TRP	412	70.348	8.642	-23.820	1.00	24.02	A	O
ATOM	1738	N	LEU	413	70.981	6.496	-23.982	1.00	22.96	A	N
ATOM	1739	CA	LEU	413	70.328	6.328	-25.266	1.00	22.10	A	C
ATOM	1740	CB	LEU	413	71.124	5.395	-26.164	1.00	21.30	A	C
ATOM	1741	CG	LEU	413	72.298	4.709	-25.486	1.00	21.18	A	C
ATOM	1742	CD1	LEU	413	71.737	3.602	-24.625	1.00	22.83	A	C
ATOM	1743	CD2	LEU	413	73.278	4.156	-26.518	1.00	20.68	A	C
ATOM	1744	C	LEU	413	68.910	5.830	-25.053	1.00	21.85	A	C
ATOM	1745	O	LEU	413	68.060	5.969	-25.921	1.00	21.68	A	O
ATOM	1746	N	VAL	414	68.639	5.284	-23.878	1.00	22.66	A	N
ATOM	1747	CA	VAL	414	67.291	4.816	-23.586	1.00	23.82	A	C
ATOM	1748	CB	VAL	414	67.015	3.423	-24.193	1.00	23.81	A	C
ATOM	1749	CG1	VAL	414	66.430	2.460	-23.158	1.00	22.73	A	C
ATOM	1750	CG2	VAL	414	66.049	3.583	-25.334	1.00	25.76	A	C
ATOM	1751	C	VAL	414	67.014	4.835	-22.098	1.00	23.69	A	C
ATOM	1752	O	VAL	414	67.927	4.671	-21.289	1.00	24.07	A	O
ATOM	1753	N	SER	415	65.752	5.028	-21.738	1.00	22.85	A	N
ATOM	1754	CA	SER	415	65.419	5.093	-20.335	1.00	23.14	A	C
ATOM	1755	CB	SER	415	65.846	6.450	-19.775	1.00	24.23	A	C
ATOM	1756	OG	SER	415	65.007	7.491	-20.251	1.00	26.07	A	O

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ATOM	1757	C	SER	415	63.948	4.899	-20.037	1.00	22.86	A	C
ATOM	1758	O	SER	415	63.089	5.069	-20.910	1.00	23.97	A	O
ATOM	1759	N	TRP	416	63.672	4.618	-18.767	1.00	21.41	A	N
ATOM	1760	CA	TRP	416	62.322	4.421	-18.304	1.00	19.57	A	C
ATOM	1761	CB	TRP	416	61.865	3.007	-13.588	1.00	17.06	A	C
ATOM	1762	CG	TRP	416	62.260	2.041	-17.521	1.00	16.87	A	C
ATOM	1763	CD2	TRP	416	63.443	1.239	-17.478	1.00	15.83	A	C
ATOM	1764	CE2	TRP	416	63.369	0.445	-16.302	1.00	15.80	A	C
ATOM	1765	CE3	TRP	416	64.552	1.103	-18.319	1.00	14.84	A	C
ATOM	1766	CD1	TRP	416	61.540	1.722	-16.399	1.00	17.16	A	C
ATOM	1767	NE1	TRP	416	62.201	0.763	-15.664	1.00	16.94	A	N
ATOM	1768	CZ2	TRP	416	64.363	-0.471	-15.949	1.00	14.88	A	C
ATOM	1769	CZ3	TRP	416	65.543	0.190	-17.974	1.00	14.56	A	C
ATOM	1770	CH2	TRP	416	65.441	-0.587	-16.795	1.00	16.11	A	C
ATOM	1771	C	TRP	416	62.333	4.641	-16.814	1.00	20.77	A	C
ATOM	1772	O	TRP	416	63.362	4.544	-16.159	1.00	20.79	A	O
ATOM	1773	N	THR	417	61.152	4.849	-16.269	1.00	22.09	A	N
ATOM	1774	CA	THR	417	61.015	5.072	-14.850	1.00	22.77	A	C
ATOM	1775	CB	THR	417	59.898	6.091	-14.547	1.00	24.00	A	C
ATOM	1776	OG1	THR	417	59.340	5.828	-13.249	1.00	23.51	A	O
ATOM	1777	CG2	THR	417	58.794	5.997	-15.598	1.00	25.25	A	C
ATOM	1778	C	THR	417	60.636	3.789	-14.168	1.00	23.06	A	C
ATOM	1779	O	THR	417	59.626	3.165	-14.504	1.00	22.13	A	O
ATOM	1780	N	GLU	418	61.457	3.397	-13.210	1.00	23.85	A	N
ATOM	1781	CA	GLU	418	61.170	2.223	-12.419	1.00	24.52	A	C
ATOM	1782	CB	GLU	418	62.391	1.859	-11.573	1.00	25.74	A	C
ATOM	1783	CG	GLU	418	62.121	1.502	-10.136	1.00	29.09	A	C
ATOM	1784	CD	GLU	418	61.870	2.726	-9.297	1.00	30.73	A	C
ATOM	1785	OE1	GLU	418	60.703	2.974	-9.001	1.00	29.97	A	O
ATOM	1786	OE2	GLU	418	62.826	3.446	-8.958	1.00	32.86	A	O
ATOM	1787	C	GLU	418	59.937	2.550	-11.568	1.00	23.68	A	C
ATOM	1788	O	GLU	418	59.722	3.695	-11.167	1.00	23.07	A	O
ATOM	1789	N	ASN	419	59.157	1.527	-11.261	1.00	23.82	A	N
ATOM	1790	CA	ASN	419	57.940	1.701	-10.493	1.00	24.31	A	C
ATOM	1791	CB	ASN	419	56.953	0.556	-10.775	1.00	25.73	A	C
ATOM	1792	CG	ASN	419	57.530	-0.828	-10.445	1.00	26.61	A	C
ATOM	1793	OD1	ASN	419	58.247	-1.426	-11.257	1.00	26.64	A	O
ATOM	1794	ND2	ASN	419	57.204	-1.344	-9.258	1.00	25.32	A	N
ATOM	1795	C	ASN	419	58.108	1.866	-8.996	1.00	23.48	A	C
ATOM	1796	O	ASN	419	57.585	2.826	-8.434	1.00	24.98	A	O
ATOM	1797	N	ILE	420	58.868	0.965	-8.368	1.00	22.41	A	N
ATOM	1798	CA	ILE	420	59.076	0.958	-6.904	1.00	21.22	A	C
ATOM	1799	CB	ILE	420	60.296	0.127	-6.511	1.00	20.61	A	C
ATOM	1800	CG2	ILE	420	60.286	-0.093	-4.998	1.00	20.03	A	C
ATOM	1801	CG1	ILE	420	60.315	-1.196	-7.284	1.00	20.77	A	C
ATOM	1802	CD1	ILE	420	59.151	-2.114	-7.003	1.00	19.98	A	C
ATOM	1803	C	ILE	420	59.244	2.316	-6.230	1.00	20.38	A	C
ATOM	1804	O	ILE	420	58.406	2.747	-5.426	1.00	19.51	A	O
ATOM	1805	N	GLN	421	60.388	2.927	-6.519	1.00	20.23	A	N
ATOM	1806	CA	GLN	421	60.750	4.241	-6.018	1.00	19.88	A	C
ATOM	1807	CB	GLN	421	62.278	4.348	-5.901	1.00	19.71	A	C
ATOM	1808	CG	GLN	421	62.933	3.240	-5.089	1.00	19.67	A	C
ATOM	1809	CD	GLN	421	62.462	3.233	-3.647	1.00	20.19	A	C
ATOM	1810	OE1	GLN	421	63.242	3.476	-2.739	1.00	21.37	A	O
ATOM	1811	NE2	GLN	421	61.177	2.954	-3.433	1.00	21.55	A	N
ATOM	1812	C	GLN	421	60.268	5.278	-7.012	1.00	19.11	A	C
ATOM	1813	O	GLN	421	60.553	6.454	-6.852	1.00	20.04	A	O
ATOM	1814	N	GLY	422	59.534	4.832	-8.031	1.00	18.61	A	N
ATOM	1815	CA	GLY	422	59.058	5.721	-9.071	1.00	17.71	A	C
ATOM	1816	C	GLY	422	60.257	6.512	-9.563	1.00	17.19	A	C
ATOM	1817	O	GLY	422	60.174	7.723	-9.738	1.00	18.13	A	O
ATOM	1818	N	SER	423	61.392	5.848	-9.720	1.00	16.53	A	N

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ATOM	1819	CA	SER	423	62.588	6.544	-10.146	1.00	16.48	A	C
ATOM	1820	CB	SER	423	63.755	6.196	-9.228	1.00	18.18	A	C
ATOM	1821	OG	SER	423	63.388	6.314	-7.857	1.00	19.56	A	O
ATOM	1822	C	SER	423	62.943	6.157	-11.555	1.00	16.41	A	C
ATOM	1823	O	SER	423	62.603	5.066	-12.008	1.00	17.15	A	O
ATOM	1824	N	ILE	424	63.679	7.031	-12.233	1.00	16.87	A	N
ATOM	1825	CA	ILE	424	64.094	6.793	-13.615	1.00	16.92	A	C
ATOM	1826	CB	ILE	424	64.476	8.123	-14.307	1.00	15.69	A	C
ATOM	1827	CG2	ILE	424	64.994	7.851	-15.718	1.00	15.34	A	C
ATOM	1828	CG1	ILE	424	63.268	9.066	-14.332	1.00	13.86	A	G
ATOM	1829	CD1	ILE	424	63.514	10.379	-15.054	1.00	11.61	A	C
ATOM	1830	C	ILE	424	65.288	5.841	-13.737	1.00	17.74	A	C
ATOM	1831	O	ILE	424	66.177	5.811	-12.885	1.00	18.68	A	O
ATOM	1832	N	LYS	425	65.296	5.069	-14.814	1.00	18.06	A	N
ATOM	1833	CA	LYS	425	66.379	4.135	-15.115	1.00	17.03	A	C
ATOM	1834	CB	LYS	425	65.854	2.709	-15.104	1.00	15.58	A	C
ATOM	1835	CG	LYS	425	65.016	2.411	-13.881	1.00	15.41	A	C
ATOM	1836	CD	LYS	425	65.582	1.265	-13.060	1.00	14.82	A	C
ATOM	1837	CE	LYS	425	66.843	1.667	-12.314	1.00	13.74	A	C
ATOM	1838	NZ	LYS	425	67.302	0.584	-11.385	1.00	14.11	A	N
ATOM	1839	C	LYS	425	66.828	4.526	-16.515	1.00	16.57	A	C
ATOM	1840	O	LYS	425	66.081	5.204	-17.223	1.00	17.59	A	O
ATOM	1841	N	TYR	426	68.048	4.152	-16.898	1.00	15.97	A	N
ATOM	1842	CA	TYR	426	68.565	4.508	-18.224	1.00	16.54	A	C
ATOM	1843	CB	TYR	426	69.314	5.845	-18.200	1.00	18.50	A	C
ATOM	1844	CG	TYR	426	68.729	6.982	-17.413	1.00	20.51	A	C
ATOM	1845	CD1	TYR	426	68.841	7.030	-16.023	1.00	21.69	A	C
ATOM	1846	CE1	TYR	426	68.421	8.147	-15.305	1.00	24.19	A	C
ATOM	1847	CD2	TYR	426	68.173	8.071	-18.069	1.00	22.55	A	C
ATOM	1848	CE2	TYR	426	67.747	9.200	-17.372	1.00	25.06	A	C
ATOM	1849	CZ	TYR	426	67.872	9.237	-15.989	1.00	25.64	A	C
ATOM	1850	OH	TYR	426	67.434	10.361	-15.316	1.00	27.52	A	O
ATOM	1851	C	TYR	426	69.603	3.537	-18.733	1.00	15.82	A	C
ATOM	1852	O	TYR	426	70.302	2.924	-17.960	1.00	16.05	A	O
ATOM	1853	N	ILE	427	69.762	3.463	-20.042	1.00	16.16	A	N
ATOM	1854	CA	ILE	427	70.806	2.629	-20.604	1.00	17.51	A	C
ATOM	1855	CB	ILE	427	70.336	1.806	-21.784	1.00	17.40	A	C
ATOM	1856	CG2	ILE	427	71.487	0.935	-22.264	1.00	17.43	A	C
ATOM	1857	CG1	ILE	427	69.128	0.961	-21.396	1.00	17.60	A	C
ATOM	1858	CD1	ILE	427	68.617	0.083	-22.525	1.00	18.28	A	C
ATOM	1859	C	ILE	427	71.794	3.642	-21.151	1.00	18.61	A	C
ATOM	1860	O	ILE	427	71.414	4.487	-21.974	1.00	18.56	A	O
ATOM	1861	N	MET	428	73.031	3.598	-20.662	1.00	19.90	A	N
ATOM	1862	CA	MET	428	74.073	4.527	-21.119	1.00	21.88	A	C
ATOM	1863	CB	MET	428	74.521	5.471	-19.990	1.00	23.22	A	C
ATOM	1864	CG	MET	428	73.424	6.261	-19.289	1.00	24.01	A	C
ATOM	1865	SD	MET	428	73.989	6.797	-17.630	1.00	28.98	A	S
ATOM	1866	CE	MET	428	73.914	8.615	-17.773	1.00	27.93	A	C
ATOM	1867	C	MET	428	75.265	3.699	-21.606	1.00	22.41	A	C
ATOM	1868	O	MET	428	75.296	2.486	-21.402	1.00	21.75	A	O
ATOM	1869	N	LEU	429	76.245	4.364	-22.218	1.00	23.20	A	N
ATOM	1870	CA	LEU	429	77.436	3.703	-22.765	1.00	25.24	A	C
ATOM	1871	CB	LEU	429	78.262	4.690	-23.593	1.00	25.51	A	C
ATOM	1872	CG	LEU	429	77.629	5.310	-24.838	1.00	26.27	A	C
ATOM	1873	CD1	LEU	429	78.718	6.023	-25.650	1.00	26.33	A	C
ATOM	1874	CD2	LEU	429	76.963	4.219	-25.690	1.00	26.14	A	C
ATOM	1875	C	LEU	429	78.381	3.039	-21.778	1.00	26.90	A	C
ATOM	1876	O	LEU	429	78.101	2.907	-20.583	1.00	27.23	A	O
ATOM	1877	N	ASN	430	79.529	2.639	-22.305	1.00	28.48	A	N
ATOM	1878	CA	ASN	430	80.549	2.002	-21.501	1.00	30.10	A	C
ATOM	1879	CB	ASN	430	81.306	0.954	-22.308	1.00	32.07	A	C
ATOM	1880	CG	ASN	430	81.159	-0.431	-21.717	1.00	34.68	A	C

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ATOM	1881	OD1	ASN	430	80.777	-0.579	-20.549	1.00	35.98	A	O
ATOM	1882	ND2	ASN	430	81.431	-1.458	-22.519	1.00	36.33	A	N
ATOM	1883	C	ASN	430	81.535	3.011	-20.961	1.00	31.12	A	C
ATOM	1884	O	ASN	430	81.592	4.155	-21.420	1.00	31.35	A	O
ATOM	1885	N	PRO	431	82.254	2.631	-19.902	1.00	31.20	A	N
ATOM	1886	CD	PRO	431	81.872	1.526	-19.012	1.00	30.55	A	C
ATOM	1887	CA	PRO	431	83.257	3.475	-19.259	1.00	31.21	A	C
ATOM	1888	CB	PRO	431	83.724	2.600	-18.112	1.00	31.20	A	C
ATOM	1889	CG	PRO	431	82.460	1.959	-17.699	1.00	31.03	A	C
ATOM	1890	C	PRO	431	84.384	3.794	-20.220	1.00	31.45	A	C
ATOM	1891	O	PRO	431	84.891	4.917	-20.237	1.00	32.55	A	O
ATOM	1892	N	SER	432	84.778	2.802	-21.015	1.00	31.46	A	N
ATOM	1893	CA	SER	432	85.829	2.997	-22.010	1.00	31.54	A	C
ATOM	1894	CB	SER	432	86.114	1.682	-22.749	1.00	32.34	A	C
ATOM	1895	OG	SER	432	84.921	1.095	-23.252	1.00	34.13	A	O
ATOM	1896	C	SER	432	85.378	4.093	-22.994	1.00	30.98	A	C
ATOM	1897	O	SER	432	86.206	4.789	-23.580	1.00	31.43	A	O
ATOM	1898	N	SER	433	84.062	4.272	-23.115	1.00	29.99	A	N
ATOM	1899	CA	SER	433	83.476	5.280	-23.984	1.00	29.01	A	C
ATOM	1900	CB	SER	433	81.955	5.243	-23.894	1.00	29.80	A	C
ATOM	1901	OG	SER	433	81.482	3.915	-23.988	1.00	31.49	A	O
ATOM	1902	C	SER	433	83.919	6.675	-23.604	1.00	28.05	A	C
ATOM	1903	O	SER	433	84.010	6.989	-22.426	1.00	27.10	A	O
ATOM	1904	N	ARG	434	84.149	7.511	-24.616	1.00	27.71	A	N
ATOM	1905	CA	ARG	434	84.564	8.899	-24.423	1.00	27.15	A	C
ATOM	1906	CB	ARG	434	84.451	9.702	-25.709	1.00	26.96	A	C
ATOM	1907	CG	ARG	434	84.451	11.211	-25.455	1.00	26.02	A	C
ATOM	1908	CD	ARG	434	83.459	11.957	-26.331	1.00	26.89	A	C
ATOM	1909	NE	ARG	434	82.070	11.785	-25.908	1.00	28.79	A	N
ATOM	1910	CZ	ARG	434	81.010	12.226	-26.595	1.00	29.88	A	C
ATOM	1911	NH1	ARG	434	81.174	12.873	-27.747	1.00	29.40	A	N
ATOM	1912	NH2	ARG	434	79.775	12.003	-26.142	1.00	29.27	A	N
ATOM	1913	C	ARG	434	83.634	9.564	-23.463	1.00	27.43	A	C
ATOM	1914	O	ARG	434	84.039	10.014	-22.403	1.00	27.95	A	O
ATOM	1915	N	ILE	435	82.392	9.697	-23.902	1.00	27.83	A	N
ATOM	1916	CA	ILE	435	81.360	10.327	-23.106	1.00	29.27	A	C
ATOM	1917	CB	ILE	435	79.959	9.940	-23.637	1.00	29.10	A	C
ATOM	1918	CG2	ILE	435	79.943	8.468	-24.020	1.00	29.95	A	C
ATOM	1919	CG1	ILE	435	78.858	10.303	-22.631	1.00	28.44	A	C
ATOM	1920	CD1	ILE	435	78.726	11.778	-22.339	1.00	27.73	A	C
ATOM	1921	C	ILE	435	81.508	9.956	-21.637	1.00	30.01	A	C
ATOM	1922	O	ILE	435	81.806	10.810	-20.808	1.00	30.49	A	O
ATOM	1923	N	LYS	436	81.432	8.664	-21.345	1.00	31.32	A	N
ATOM	1924	CA	LYS	436	81.534	8.189	-19.971	1.00	32.42	A	C
ATOM	1925	CB	LYS	436	81.221	6.679	-19.926	1.00	32.48	A	C
ATOM	1926	CG	LYS	436	80.556	6.167	-18.633	1.00	32.36	A	C
ATOM	1927	CD	LYS	436	79.126	6.706	-18.438	1.00	33.08	A	C
ATOM	1928	CE	LYS	436	78.451	6.149	-17.149	1.00	33.89	A	C
ATOM	1929	NZ	LYS	436	77.094	6.737	-16.808	1.00	32.97	A	N
ATOM	1930	C	LYS	436	82.915	8.497	-19.360	1.00	32.97	A	C
ATOM	1931	O	LYS	436	83.051	8.618	-18.140	1.00	33.36	A	O
ATOM	1932	N	GLY	437	83.915	8.688	-20.219	1.00	33.67	A	N
ATOM	1933	CA	GLY	437	85.268	8.960	-19.756	1.00	33.94	A	C
ATOM	1934	C	GLY	437	85.587	10.406	-19.449	1.00	33.93	A	C
ATOM	1935	O	GLY	437	85.904	10.739	-18.307	1.00	33.93	A	O
ATOM	1936	N	GLU	438	85.486	11.260	-20.465	1.00	33.97	A	N
ATOM	1937	CA	GLU	438	85.772	12.675	-20.325	1.00	34.24	A	C
ATOM	1938	CB	GLU	438	85.224	13.466	-21.517	1.00	36.73	A	C
ATOM	1939	CG	GLU	438	85.848	14.871	-21.641	1.00	42.46	A	C
ATOM	1940	CD	GLU	438	85.838	15.464	-23.071	1.00	45.97	A	C
ATOM	1941	OE1	GLU	438	84.740	15.595	-23.671	1.00	47.30	A	O
ATOM	1942	OE2	GLU	438	86.933	15.829	-23.584	1.00	47.11	A	O

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ATOM	1943	C	GLU	438	85.253	13.229	-19.008	1.00	33.71	A	C
ATOM	1944	O	GLU	438	85.990	13.908	-18.300	1.00	33.90	A	O
ATOM	1945	N	LYS	439	84.022	12.881	-18.638	1.00	32.64	A	N
ATOM	1946	CA	LYS	439	83.459	13.357	-17.374	1.00	31.75	A	C
ATOM	1947	CB	LYS	439	82.052	12.777	-17.127	1.00	31.06	A	C
ATOM	1948	CG	LYS	439	81.268	13.413	-15.929	1.00	31.38	A	C
ATOM	1949	CD	LYS	439	79.938	12.644	-15.532	1.00	28.80	A	C
ATOM	1950	CE	LYS	439	79.257	13.230	-14.249	1.00	25.36	A	C
ATOM	1951	NZ	LYS	439	78.174	12.391	-13.629	1.00	19.13	A	N
ATOM	1952	C	LYS	439	84.419	12.911	-16.275	1.00	32.07	A	C
ATOM	1953	O	LYS	439	85.051	13.739	-15.617	1.00	32.16	A	O
ATOM	1954	N	ASP	440	84.608	11.602	-16.158	1.00	32.34	A	N
ATOM	1955	CA	ASP	440	85.501	11.067	-15.142	1.00	33.49	A	C
ATOM	1956	CB	ASP	440	85.592	9.544	-15.254	1.00	34.61	A	C
ATOM	1957	CG	ASP	440	86.474	8.924	-14.165	1.00	36.14	A	C
ATOM	1958	OD1	ASP	440	85.943	8.417	-13.145	1.00	35.94	A	O
ATOM	1959	OD2	ASP	440	87.708	8.937	-14.342	1.00	36.68	A	O
ATOM	1960	C	ASP	440	86.888	11.691	-15.256	1.00	33.29	A	C
ATOM	1961	O	ASP	440	87.492	12.067	-14.257	1.00	32.86	A	O
ATOM	1962	N	TRP	441	87.381	11.803	-16.480	1.00	34.07	A	N
ATOM	1963	CA	TRP	441	88.691	12.388	-16.721	1.00	35.15	A	C
ATOM	1964	CB	TRP	441	88.991	12.416	-18.232	1.00	38.45	A	C
ATOM	1965	CG	TRP	441	89.964	13.485	-18.662	1.00	41.53	A	C
ATOM	1966	CD2	TRP	441	89.635	14.773	-19.200	1.00	43.18	A	C
ATOM	1967	CE2	TRP	441	90.854	15.462	-19.414	1.00	43.69	A	C
ATOM	1968	CE3	TRP	441	88.429	15.413	-19.518	1.00	43.69	A	C
ATOM	1969	CD1	TRP	441	91.329	13.442	-18.582	1.00	42.47	A	C
ATOM	1970	NE1	TRP	441	91.871	14.629	-19.030	1.00	43.27	A	N
ATOM	1971	CZ2	TRP	441	90.900	16.758	-19.931	1.00	44.34	A	C
ATOM	1972	CZ3	TRP	441	88.472	16.699	-20.030	1.00	44.44	A	C
ATOM	1973	CH2	TRP	441	89.704	17.360	-20.232	1.00	44.84	A	C
ATOM	1974	C	TRP	441	88.732	13.790	-16.132	1.00	34.29	A	C
ATOM	1975	O	TRP	441	89.579	14.099	-15.303	1.00	33.79	A	O
ATOM	1976	N	GLN	442	87.797	14.634	-16.539	1.00	34.09	A	N
ATOM	1977	CA	GLN	442	87.776	15.983	-16.014	1.00	34.05	A	C
ATOM	1978	CB	GLN	442	86.899	16.896	-16.879	1.00	35.09	A	C
ATOM	1979	CG	GLN	442	85.434	16.530	-16.934	1.00	36.32	A	C
ATOM	1980	CD	GLN	442	84.628	17.168	-15.817	1.00	37.26	A	C
ATOM	1981	OE1	GLN	442	84.500	16.611	-14.720	1.00	37.19	A	O
ATOM	1982	NE2	GLN	442	84.077	18.348	-16.092	1.00	37.40	A	N
ATOM	1983	C	GLN	442	87.320	15.955	-14.559	1.00	33.56	A	C
ATOM	1984	O	GLN	442	87.489	16.934	-13.835	1.00	33.87	A	O
ATOM	1985	N	LYS	443	86.773	14.818	-14.127	1.00	32.58	A	N
ATOM	1986	CA	LYS	443	86.322	14.674	-12.749	1.00	31.87	A	C
ATOM	1987	CB	LYS	443	85.661	13.314	-12.524	1.00	31.98	A	C
ATOM	1988	CG	LYS	443	85.323	13.035	-11.064	1.00	32.97	A	C
ATOM	1989	CD	LYS	443	86.105	11.851	-10.512	1.00	33.27	A	C
ATOM	1990	CE	LYS	443	85.542	10.531	-11.014	1.00	32.93	A	C
ATOM	1991	NZ	LYS	443	86.277	9.337	-10.512	1.00	32.25	A	N
ATOM	1992	C	LYS	443	87.500	14.831	-11.804	1.00	30.92	A	C
ATOM	1993	O	LYS	443	87.372	15.411	-10.726	1.00	29.86	A	O
ATOM	1994	N	TYR	444	88.642	14.288	-12.212	1.00	30.87	A	N
ATOM	1995	CA	TYR	444	89.854	14.371	-11.415	1.00	31.30	A	C
ATOM	1996	CB	TYR	444	90.846	13.281	-11.810	1.00	31.95	A	C
ATOM	1997	CG	TYR	444	90.355	11.904	-11.437	1.00	33.62	A	C
ATOM	1998	CD1	TYR	444	90.646	11.356	-10.189	1.00	34.21	A	C
ATOM	1999	CE1	TYR	444	90.140	10.114	-9.807	1.00	34.43	A	C
ATOM	2000	CD2	TYR	444	89.544	11.171	-12.304	1.00	34.17	A	C
ATOM	2001	CE2	TYR	444	89.031	9.930	-11.930	1.00	34.38	A	C
ATOM	2002	CZ	TYR	444	89.333	9.406	-10.680	1.00	34.52	A	C
ATOM	2003	OH	TYR	444	88.830	8.176	-10.307	1.00	35.30	A	O
ATOM	2004	C	TYR	444	90.472	15.740	-11.579	1.00	31.16	A	C

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ATOM	2005	O	TYR	444	91.090	16.268	-10.649	1.00	31.05	A	O
ATOM	2006	N	GLU	445	90.291	16.333	-12.752	1.00	30.97	A	N
ATOM	2007	CA	GLU	445	90.825	17.662	-12.973	1.00	31.56	A	C
ATOM	2008	CB	GLU	445	90.449	18.168	-14.363	1.00	33.10	A	C
ATOM	2009	CG	GLU	445	91.494	17.834	-15.388	1.00	35.74	A	C
ATOM	2010	CD	GLU	445	92.889	18.187	-14.893	1.00	37.06	A	C
ATOM	2011	OE1	GLU	445	93.609	17.267	-14.436	1.00	36.43	A	O
ATOM	2012	OE2	GLU	445	93.245	19.391	-14.933	1.00	37.94	A	O
ATOM	2013	C	GLU	445	90.312	18.624	-11.907	1.00	31.01	A	C
ATOM	2014	O	GLU	445	91.021	19.532	-11.467	1.00	31.50	A	O
ATOM	2015	N	THR	446	89.095	18.358	-11.448	1.00	29.94	A	N
ATOM	2016	CA	THR	446	88.442	19.178	-10.446	1.00	28.51	A	C
ATOM	2017	CB	THR	446	86.986	18.730	-10.233	1.00	28.89	A	C
ATOM	2018	OG1	THR	446	86.508	18.080	-11.420	1.00	29.61	A	O
ATOM	2019	CG2	THR	446	86.095	19.934	-9.947	1.00	28.55	A	C
ATOM	2020	C	THR	446	89.185	19.104	-9.130	1.00	27.80	A	C
ATOM	2021	O	THR	446	89.656	20.114	-8.628	1.00	27.72	A	O
ATOM	2022	N	ALA	447	89.298	17.904	-8.577	1.00	27.82	A	N
ATOM	2023	CA	ALA	447	90.004	17.719	-7.312	1.00	28.36	A	C
ATOM	2024	CB	ALA	447	90.048	16.247	-6.928	1.00	27.47	A	C
ATOM	2025	C	ALA	447	91.408	18.246	-7.502	1.00	28.75	A	C
ATOM	2026	O	ALA	447	91.957	18.921	-6.631	1.00	29.70	A	O
ATOM	2027	N	ARG	448	91.948	17.988	-8.687	1.00	28.89	A	N
ATOM	2028	CA	ARG	448	93.278	18.435	-9.048	1.00	29.11	A	C
ATOM	2029	CB	ARG	448	93.506	18.131	-10.523	1.00	28.57	A	C
ATOM	2030	CG	ARG	448	94.940	18.009	-10.919	1.00	29.46	A	C
ATOM	2031	CD	ARG	448	95.171	16.694	-11.648	1.00	30.79	A	C
ATOM	2032	NE	ARG	448	96.556	16.557	-12.088	1.00	32.29	A	N
ATOM	2033	CZ	ARG	448	97.033	17.083	-13.215	1.00	32.72	A	C
ATOM	2034	NH1	ARG	448	96.229	17.773	-14.023	1.00	31.74	A	N
ATOM	2035	NH2	ARG	448	98.325	16.962	-13.510	1.00	32.19	A	N
ATOM	2036	C	ARG	448	93.403	19.942	-8.792	1.00	29.56	A	C
ATOM	2037	O	ARG	448	94.469	20.431	-8.427	1.00	30.44	A	O
ATOM	2038	N	ARG	449	92.284	20.653	-8.893	1.00	29.58	A	N
ATOM	2039	CA	ARG	449	92.277	22.093	-8.700	1.00	30.55	A	C
ATOM	2040	CB	ARG	449	91.377	22.741	-9.724	1.00	30.46	A	C
ATOM	2041	CG	ARG	449	91.782	22.440	-11.132	1.00	31.55	A	C
ATOM	2042	CD	ARG	449	90.907	23.183	-12.107	1.00	33.02	A	C
ATOM	2043	NE	ARG	449	89.509	22.767	-12.037	1.00	34.65	A	N
ATOM	2044	CZ	ARG	449	88.621	23.237	-11.161	1.00	35.39	A	C
ATOM	2045	NH1	ARG	449	88.980	24.142	-10.251	1.00	34.81	A	N
ATOM	2046	NH2	ARG	449	87.353	22.847	-11.235	1.00	35.98	A	N
ATOM	2047	C	ARG	449	91.945	22.635	-7.319	1.00	31.01	A	C
ATOM	2048	O	ARG	449	92.318	23.766	-7.000	1.00	32.01	A	O
ATOM	2049	N	LEU	450	91.158	21.911	-6.534	1.00	31.31	A	N
ATOM	2050	CA	LEU	450	90.886	22.394	-5.189	1.00	32.13	A	C
ATOM	2051	CB	LEU	450	89.784	21.578	-4.524	1.00	30.96	A	C
ATOM	2052	CG	LEU	450	89.820	21.606	-2.992	1.00	30.38	A	C
ATOM	2053	CD1	LEU	450	88.460	21.902	-2.397	1.00	31.06	A	C
ATOM	2054	CD2	LEU	450	90.356	20.279	-2.499	1.00	31.37	A	C
ATOM	2055	C	LEU	450	92.203	22.221	-4.430	1.00	33.86	A	C
ATOM	2056	O	LEU	450	92.518	22.978	-3.513	1.00	33.46	A	O
ATOM	2057	N	LYS	451	92.980	21.236	-4.882	1.00	35.54	A	N
ATOM	2058	CA	LYS	451	94.271	20.875	-4.315	1.00	36.77	A	C
ATOM	2059	CB	LYS	451	95.036	20.013	-5.319	1.00	37.00	A	C
ATOM	2060	CG	LYS	451	96.407	19.539	-4.838	1.00	39.04	A	C
ATOM	2061	CD	LYS	451	97.540	20.113	-5.693	1.00	40.06	A	C
ATOM	2062	CE	LYS	451	97.377	19.712	-7.150	1.00	41.65	A	C
ATOM	2063	NZ	LYS	451	98.444	20.252	-8.032	1.00	42.66	A	N
ATOM	2064	C	LYS	451	95.100	22.092	-3.935	1.00	37.81	A	C
ATOM	2065	O	LYS	451	95.753	22.116	-2.882	1.00	38.89	A	O
ATOM	2066	N	LYS	452	95.084	23.095	-4.804	1.00	37.94	A	N



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ATOM	2067	CA	LYS	452	95.828	24.317	-4.554	1.00	38.37	A	C
ATOM	2068	CB	LYS	452	96.046	25.068	-5.867	1.00	39.87	A	C
ATOM	2069	CG	LYS	452	96.284	24.175	-7.070	1.00	42.69	A	C
ATOM	2070	CD	LYS	452	96.582	25.004	-8.320	1.00	46.25	A	C
ATOM	2071	CE	LYS	452	96.684	24.130	-9.582	1.00	47.70	A	C
ATOM	2072	NZ	LYS	452	97.745	23.068	-9.501	1.00	49.45	A	N
ATOM	2073	C	LYS	452	94.960	25.159	-3.639	1.00	38.24	A	C
ATOM	2074	O	LYS	452	95.258	25.363	-2.457	1.00	38.75	A	O
ATOM	2075	N	CYS	453	93.849	25.598	-4.218	1.00	37.62	A	N
ATOM	2076	CA	CYS	453	92.844	26.425	-3.572	1.00	36.52	A	C
ATOM	2077	CB	CYS	453	91.891	26.924	-4.664	1.00	36.80	A	C
ATOM	2078	SG	CYS	453	90.391	27.713	-4.099	1.00	38.54	A	S
ATOM	2079	C	CYS	453	92.088	25.615	-2.505	1.00	35.58	A	C
ATOM	2080	O	CYS	453	90.915	25.282	-2.688	1.00	35.12	A	O
ATOM	2081	N	VAL	454	92.773	25.283	-1.407	1.00	34.06	A	N
ATOM	2082	CA	VAL	454	92.175	24.498	-0.327	1.00	32.00	A	C
ATOM	2083	CB	VAL	454	92.473	22.974	-0.478	1.00	31.46	A	C
ATOM	2084	CG1	VAL	454	93.957	22.732	-0.646	1.00	31.15	A	C
ATOM	2085	CG2	VAL	454	91.961	22.210	0.735	1.00	30.51	A	C
ATOM	2086	C	VAL	454	92.622	24.959	1.054	1.00	31.77	A	C
ATOM	2087	O	VAL	454	91.783	25.145	1.950	1.00	30.67	A	O
ATOM	2088	N	ASP	455	93.938	25.127	1.226	1.00	31.65	A	N
ATOM	2089	CA	ASP	455	94.507	25.571	2.501	1.00	31.14	A	C
ATOM	2090	CB	ASP	455	95.988	25.921	2.339	1.00	32.64	A	C
ATOM	2091	CG	ASP	455	96.832	24.741	1.839	1.00	34.40	A	C
ATOM	2092	OD1	ASP	455	96.312	23.599	1.757	1.00	34.51	A	O
ATOM	2093	OD2	ASP	455	98.031	24.958	1.525	1.00	34.71	A	O
ATOM	2094	C	ASP	455	93.719	26.802	2.898	1.00	30.35	A	C
ATOM	2095	O	ASP	455	93.265	26.937	4.034	1.00	29.31	A	O
ATOM	2096	N	LYS	456	93.472	27.635	1.894	1.00	30.50	A	N
ATOM	2097	CA	LYS	456	92.702	28.846	2.053	1.00	31.29	A	C
ATOM	2098	CB	LYS	456	92.559	29.529	0.699	1.00	32.46	A	C
ATOM	2099	CG	LYS	456	91.556	30.665	0.655	1.00	33.96	A	C
ATOM	2100	CD	LYS	456	91.852	31.704	1.717	1.00	35.75	A	C
ATOM	2101	CE	LYS	456	91.551	33.088	1.188	1.00	36.65	A	C
ATOM	2102	NZ	LYS	456	90.217	33.131	0.542	1.00	38.12	A	N
ATOM	2103	C	LYS	456	91.333	28.457	2.569	1.00	31.29	A	C
ATOM	2104	O	LYS	456	90.909	28.902	3.637	1.00	31.70	A	O
ATOM	2105	N	ILE	457	90.667	27.590	1.818	1.00	31.10	A	N
ATOM	2106	CA	ILE	457	89.341	27.136	2.183	1.00	31.26	A	C
ATOM	2107	CB	ILE	457	88.906	25.952	1.344	1.00	31.50	A	C
ATOM	2108	CG2	ILE	457	87.520	25.517	1.767	1.00	31.05	A	C
ATOM	2109	CG1	ILE	457	88.940	26.315	-0.146	1.00	32.66	A	C
ATOM	2110	CD1	ILE	457	88.280	25.281	-1.069	1.00	31.95	A	C
ATOM	2111	C	ILE	457	89.318	26.708	3.629	1.00	32.30	A	C
ATOM	2112	O	ILE	457	88.426	27.092	4.400	1.00	32.22	A	O
ATOM	2113	N	ARG	458	90.324	25.933	4.005	1.00	32.72	A	N
ATOM	2114	CA	ARG	458	90.398	25.466	5.368	1.00	33.99	A	C
ATOM	2115	CB	ARG	458	91.590	24.541	5.555	1.00	33.30	A	C
ATOM	2116	CG	ARG	458	91.381	23.205	4.849	1.00	33.22	A	C
ATOM	2117	CD	ARG	458	92.463	22.174	5.180	1.00	31.93	A	C
ATOM	2118	NE	ARG	458	92.162	20.868	4.593	1.00	30.82	A	N
ATOM	2119	CZ	ARG	458	93.017	20.159	3.862	1.00	30.37	A	C
ATOM	2120	NH1	ARG	458	94.239	20.626	3.626	1.00	29.97	A	N
ATOM	2121	NH2	ARG	458	92.644	18.987	3.356	1.00	30.62	A	N
ATOM	2122	C	ARG	458	90.404	26.615	6.362	1.00	35.73	A	C
ATOM	2123	O	ARG	458	89.531	26.671	7.236	1.00	35.70	A	O
ATOM	2124	N	ASN	459	91.309	27.577	6.170	1.00	36.87	A	N
ATOM	2125	CA	ASN	459	91.402	28.727	7.077	1.00	37.95	A	C
ATOM	2126	CB	ASN	459	92.281	29.833	6.501	1.00	39.37	A	C
ATOM	2127	CG	ASN	459	93.553	29.310	5.913	1.00	41.49	A	C
ATOM	2128	OD1	ASN	459	94.147	28.355	6.432	1.00	42.68	A	O

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ATOM	2129	ND2	ASN	459	93.985	29.919	4.805	1.00	43.10	A	N
ATOM	2130	C	ASN	459	90.025	29.306	7.255	1.00	37.62	A	C
ATOM	2131	O	ASN	459	89.551	29.512	8.375	1.00	37.49	A	O
ATOM	2132	N	GLN	460	89.367	29.521	6.128	1.00	37.08	A	N
ATOM	2133	CA	GLN	460	88.046	30.082	6.153	1.00	36.98	A	C
ATOM	2134	CB	GLN	460	87.474	30.106	4.739	1.00	38.78	A	C
ATOM	2135	CG	GLN	460	88.196	31.125	3.861	1.00	41.85	A	C
ATOM	2136	CD	GLN	460	88.126	30.806	2.382	1.00	43.94	A	C
ATOM	2137	OE1	GLN	460	88.880	29.965	1.886	1.00	45.10	A	O
ATOM	2138	NE2	GLN	460	87.244	31.500	1.660	1.00	44.54	A	N
ATOM	2139	C	GLN	460	87.162	29.345	7.145	1.00	35.73	A	C
ATOM	2140	O	GLN	460	86.787	29.928	8.160	1.00	34.72	A	O
ATOM	2141	N	TYR	461	86.965	28.041	6.952	1.00	34.76	A	N
ATOM	2142	CA	TYR	461	86.105	27.314	7.879	1.00	34.35	A	C
ATOM	2143	CB	TYR	461	85.730	25.906	7.375	1.00	33.47	A	C
ATOM	2144	CG	TYR	461	86.745	24.782	7.496	1.00	31.46	A	C
ATOM	2145	CD1	TYR	461	87.357	24.473	8.707	1.00	30.53	A	C
ATOM	2146	CE1	TYR	461	88.198	23.368	8.828	1.00	30.29	A	C
ATOM	2147	CD2	TYR	461	87.009	23.955	6.407	1.00	30.61	A	C
ATOM	2148	CE2	TYR	461	87.839	22.846	6.513	1.00	29.73	A	C
ATOM	2149	CZ	TYR	461	88.430	22.555	7.725	1.00	29.96	A	C
ATOM	2150	OH	TYR	461	89.226	21.437	7.842	1.00	29.63	A	O
ATOM	2151	C	TYR	461	86.586	27.301	9.323	1.00	34.49	A	C
ATOM	2152	O	TYR	461	85.788	27.498	10.241	1.00	34.96	A	O
ATOM	2153	N	ALA	462	87.884	27.101	9.531	1.00	33.93	A	N
ATOM	2154	CA	ALA	462	88.404	27.099	10.888	1.00	32.76	A	C
ATOM	2155	CB	ALA	462	89.901	26.869	10.892	1.00	32.58	A	C
ATOM	2156	C	ALA	462	88.057	28.464	11.463	1.00	32.18	A	C
ATOM	2157	O	ALA	462	87.509	28.572	12.557	1.00	31.72	A	O
ATOM	2158	N	ALA	463	88.273	29.498	10.661	1.00	31.98	A	N
ATOM	2159	CA	ALA	463	87.960	30.848	11.086	1.00	31.96	A	C
ATOM	2160	CB	ALA	463	88.317	31.842	9.998	1.00	31.69	A	C
ATOM	2161	C	ALA	463	86.474	30.894	11.364	1.00	32.30	A	C
ATOM	2162	O	ALA	463	86.048	31.318	12.436	1.00	32.26	A	O
ATOM	2163	N	ASP	464	85.697	30.373	10.420	1.00	32.99	A	N
ATOM	2164	CA	ASP	464	84.245	30.356	10.540	1.00	33.40	A	C
ATOM	2165	CB	ASP	464	83.608	29.657	9.345	1.00	34.42	A	C
ATOM	2166	CG	ASP	464	83.564	30.534	8.114	1.00	36.04	A	C
ATOM	2167	OD1	ASP	464	82.483	30.605	7.485	1.00	37.57	A	O
ATOM	2168	OD2	ASP	464	84.601	31.154	7.775	1.00	37.42	A	O
ATOM	2169	C	ASP	464	83.744	29.718	11.819	1.00	33.16	A	C
ATOM	2170	O	ASP	464	82.610	29.976	12.230	1.00	33.57	A	O
ATOM	2171	N	TRP	465	84.586	28.906	12.457	1.00	32.29	A	N
ATOM	2172	CA	TRP	465	84.202	28.248	13.707	1.00	32.42	A	C
ATOM	2173	CB	TRP	465	85.308	27.305	14.185	1.00	31.17	A	C
ATOM	2174	CG	TRP	465	85.544	26.144	13.283	1.00	29.55	A	C
ATOM	2175	CD2	TRP	465	86.701	25.306	13.254	1.00	28.68	A	C
ATOM	2176	CE2	TRP	465	86.490	24.337	12.255	1.00	29.41	A	C
ATOM	2177	CE3	TRP	465	87.898	25.281	13.974	1.00	28.06	A	C
ATOM	2178	CD1	TRP	465	84.700	25.664	12.326	1.00	29.87	A	C
ATOM	2179	NE1	TRP	465	85.259	24.578	11.701	1.00	29.94	A	N
ATOM	2180	CZ2	TRP	465	87.434	23.351	11.959	1.00	28.55	A	C
ATOM	2181	CZ3	TRP	465	88.834	24.306	13.678	1.00	27.51	A	C
ATOM	2182	CH2	TRP	465	88.597	23.354	12.679	1.00	27.48	A	C
ATOM	2183	C	TRP	465	83.863	29.240	14.825	1.00	32.98	A	C
ATOM	2184	O	TRP	465	83.167	28.885	15.785	1.00	33.48	A	O
ATOM	2185	N	ALA	466	84.353	30.475	14.685	1.00	33.46	A	N
ATOM	2186	CA	ALA	466	84.131	31.536	15.664	1.00	33.55	A	C
ATOM	2187	CB	ALA	466	85.439	32.280	15.932	1.00	32.13	A	C
ATOM	2188	C	ALA	466	83.056	32.516	15.209	1.00	34.12	A	C
ATOM	2189	O	ALA	466	82.861	33.558	15.835	1.00	34.07	A	O
ATOM	2190	N	SER	467	82.331	32.167	14.150	1.00	35.28	A	N

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ATOM	2191	CA	SER	467	81.287	33.040	13.611	1.00	36.81	A	C
ATOM	2192	CB	SER	467	80.687	32.432	12.343	1.00	36.68	A	C
ATOM	2193	OG	SER	467	79.572	33.187	11.892	1.00	35.96	A	O
ATOM	2194	C	SER	467	80.156	33.388	14.567	1.00	37.94	A	C
ATOM	2195	O	SER	467	80.028	32.804	15.638	1.00	37.70	A	O
ATOM	2196	N	ALA	468	79.350	34.366	14.162	1.00	39.82	A	N
ATOM	2197	CA	ALA	468	78.191	34.799	14.938	1.00	41.72	A	C
ATOM	2198	CB	ALA	468	78.011	36.302	14.826	1.00	42.08	A	C
ATOM	2199	C	ALA	468	76.942	34.074	14.417	1.00	42.58	A	C
ATOM	2200	O	ALA	468	76.091	33.642	15.196	1.00	43.24	A	O
ATOM	2201	N	GLU	469	76.834	33.942	13.096	1.00	42.87	A	N
ATOM	2202	CA	GLU	469	75.692	33.260	12.502	1.00	42.76	A	C
ATOM	2203	CB	GLU	469	75.564	33.568	11.019	1.00	45.05	A	C
ATOM	2204	CG	GLU	469	74.708	34.773	10.679	1.00	48.88	A	C
ATOM	2205	CD	GLU	469	74.493	34.904	9.173	1.00	51.58	A	C
ATOM	2206	OE1	GLU	469	75.494	35.117	8.446	1.00	53.23	A	O
ATOM	2207	OE2	GLU	469	73.332	34.771	8.711	1.00	52.68	A	O
ATOM	2208	C	GLU	469	75.816	31.768	12.678	1.00	41.84	A	C
ATOM	2209	O	GLU	469	76.780	31.149	12.215	1.00	41.68	A	O
ATOM	2210	N	MET	470	74.816	31.209	13.347	1.00	40.51	A	N
ATOM	2211	CA	MET	470	74.728	29.782	13.623	1.00	39.14	A	C
ATOM	2212	CB	MET	470	73.307	29.454	14.051	1.00	40.34	A	C
ATOM	2213	CG	MET	470	73.067	27.991	14.302	1.00	41.64	A	C
ATOM	2214	SD	MET	470	73.711	27.468	15.896	1.00	42.97	A	S
ATOM	2215	CE	MET	470	72.150	26.994	16.722	1.00	43.55	A	C
ATOM	2216	C	MET	470	75.068	28.939	12.404	1.00	37.95	A	C
ATOM	2217	O	MET	470	76.070	28.238	12.378	1.00	37.30	A	O
ATOM	2218	N	ALA	471	74.203	29.025	11.400	1.00	37.10	A	N
ATOM	2219	CA	ALA	471	74.342	28.292	10.155	1.00	36.10	A	C
ATOM	2220	CB	ALA	471	73.422	28.882	9.128	1.00	36.75	A	C
ATOM	2221	C	ALA	471	75.766	28.301	9.637	1.00	35.26	A	C
ATOM	2222	O	ALA	471	76.271	27.280	9.157	1.00	35.03	A	O
ATOM	2223	N	VAL	472	76.405	29.465	9.735	1.00	34.37	A	N
ATOM	2224	CA	VAL	472	77.784	29.628	9.280	1.00	33.59	A	C
ATOM	2225	CB	VAL	472	78.297	31.051	9.526	1.00	32.98	A	C
ATOM	2226	CG1	VAL	472	79.757	31.161	9.107	1.00	31.77	A	C
ATOM	2227	CG2	VAL	472	77.452	32.036	8.754	1.00	32.07	A	C
ATOM	2228	C	VAL	472	78.655	28.652	10.040	1.00	33.07	A	C
ATOM	2229	O	VAL	472	79.540	28.008	9.477	1.00	33.49	A	O
ATOM	2230	N	ARG	473	78.378	28.541	11.328	1.00	32.35	A	N
ATOM	2231	CA	ARG	473	79.110	27.621	12.170	1.00	32.28	A	C
ATOM	2232	CB	ARG	473	78.713	27.838	13.634	1.00	33.79	A	C
ATOM	2233	CG	ARG	473	79.088	29.218	14.219	1.00	34.71	A	C
ATOM	2234	CD	ARG	473	80.597	29.359	14.407	1.00	33.75	A	C
ATOM	2235	NE	ARG	473	80.962	30.264	15.493	1.00	33.17	A	N
ATOM	2236	CZ	ARG	473	80.632	30.083	16.774	1.00	33.41	A	C
ATOM	2237	NH1	ARG	473	79.910	29.035	17.146	1.00	32.07	A	N
ATOM	2238	NH2	ARG	473	81.095	30.909	17.705	1.00	33.96	A	N
ATOM	2239	C	ARG	473	78.770	26.196	11.724	1.00	31.14	A	C
ATOM	2240	O	ARG	473	79.649	25.438	11.292	1.00	29.99	A	O
ATOM	2241	N	GLN	474	77.475	25.878	11.762	1.00	30.16	A	N
ATOM	2242	CA	GLN	474	76.968	24.563	11.380	1.00	29.95	A	C
ATOM	2243	CB	GLN	474	75.464	24.624	11.159	1.00	28.38	A	C
ATOM	2244	CG	GLN	474	74.723	25.155	12.349	1.00	28.71	A	C
ATOM	2245	CD	GLN	474	73.381	24.501	12.520	1.00	30.18	A	C
ATOM	2246	OE1	GLN	474	72.353	25.170	12.599	1.00	31.80	A	O
ATOM	2247	NE2	GLN	474	73.375	23.177	12.566	1.00	30.82	A	N
ATOM	2248	C	GLN	474	77.650	24.083	10.116	1.00	30.29	A	C
ATOM	2249	O	GLN	474	78.142	22.955	10.036	1.00	30.59	A	O
ATOM	2250	N	ARG	475	77.730	24.986	9.155	1.00	30.63	A	N
ATOM	2251	CA	ARG	475	78.362	24.689	7.897	1.00	31.84	A	C
ATOM	2252	CB	ARG	475	78.248	25.910	6.985	1.00	33.91	A	C

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ATOM	2253	CG	ARG	475	78.835	25.704	5.593	1.00	37.72	A	C
ATOM	2254	CD	ARG	475	78.738	26.972	4.760	1.00	39.93	A	C
ATOM	2255	NE	ARG	475	79.522	28.067	5.327	1.00	41.72	A	N
ATOM	2256	CZ	ARG	475	79.298	29.350	5.069	1.00	41.91	A	C
ATOM	2257	NH1	ARG	475	78.312	29.691	4.248	1.00	41.89	A	N
ATOM	2258	NH2	ARG	475	80.054	30.288	5.635	1.00	42.26	A	N
ATOM	2259	C	ARG	475	79.835	24.290	8.095	1.00	31.23	A	C
ATOM	2260	O	ARG	475	80.196	23.117	7.938	1.00	31.19	A	O
ATOM	2261	N	ALA	476	80.659	25.261	8.487	1.00	30.86	A	N
ATOM	2262	CA	ALA	476	82.094	25.060	8.691	1.00	30.24	A	C
ATOM	2263	CB	ALA	476	82.650	26.165	9.554	1.00	30.55	A	C
ATOM	2264	C	ALA	476	82.448	23.707	9.291	1.00	29.48	A	C
ATOM	2265	O	ALA	476	83.346	23.011	8.808	1.00	29.36	A	O
ATOM	2266	N	VAL	477	81.711	23.332	10.328	1.00	28.26	A	N
ATOM	2267	CA	VAL	477	81.926	22.065	11.004	1.00	26.97	A	C
ATOM	2268	CB	VAL	477	80.838	21.811	12.050	1.00	27.08	A	C
ATOM	2269	CG1	VAL	477	81.128	20.519	12.798	1.00	27.16	A	C
ATOM	2270	CG2	VAL	477	80.726	22.987	12.986	1.00	26.62	A	C
ATOM	2271	C	VAL	477	81.814	20.936	10.007	1.00	26.13	A	C
ATOM	2272	O	VAL	477	82.761	20.175	9.794	1.00	25.59	A	O
ATOM	2273	N	ALA	478	80.626	20.848	9.413	1.00	25.24	A	N
ATOM	2274	CA	ALA	478	80.300	19.820	8.441	1.00	24.21	A	C
ATOM	2275	CB	ALA	478	79.023	20.161	7.734	1.00	24.22	A	C
ATOM	2276	C	ALA	478	81.414	19.663	7.445	1.00	23.50	A	C
ATOM	2277	O	ALA	478	81.880	18.548	7.185	1.00	23.35	A	O
ATOM	2278	N	LEU	479	81.875	20.786	6.918	1.00	22.64	A	N
ATOM	2279	CA	LEU	479	82.945	20.715	5.961	1.00	22.27	A	C
ATOM	2280	CB	LEU	479	83.375	22.107	5.504	1.00	22.97	A	C
ATOM	2281	CG	LEU	479	84.516	22.055	4.473	1.00	24.05	A	C
ATOM	2282	CD1	LEU	479	84.084	21.237	3.266	1.00	23.75	A	C
ATOM	2283	CD2	LEU	479	84.936	23.444	4.035	1.00	24.88	A	C
ATOM	2284	C	LEU	479	84.100	20.006	6.630	1.00	21.49	A	C
ATOM	2285	O	LEU	479	84.536	18.957	6.176	1.00	20.49	A	O
ATOM	2286	N	TYR	480	84.526	20.555	7.755	1.00	21.85	A	N
ATOM	2287	CA	TYR	480	85.628	20.008	8.519	1.00	23.28	A	C
ATOM	2288	CB	TYR	480	85.597	20.613	9.913	1.00	24.46	A	C
ATOM	2289	CG	TYR	480	86.486	19.968	10.940	1.00	26.29	A	C
ATOM	2290	CD1	TYR	480	87.860	20.175	10.941	1.00	27.29	A	C
ATOM	2291	CE1	TYR	480	88.664	19.668	11.981	1.00	28.71	A	C
ATOM	2292	CD2	TYR	480	85.933	19.231	11.989	1.00	28.07	A	C
ATOM	2293	CE2	TYR	480	86.724	18.725	13.029	1.00	28.52	A	C
ATOM	2294	CZ	TYR	480	88.080	18.950	13.018	1.00	28.76	A	C
ATOM	2295	OH	TYR	480	88.835	18.474	14.057	1.00	28.99	A	O
ATOM	2296	C	TYR	480	85.513	18.500	8.569	1.00	23.89	A	C
ATOM	2297	O	TYR	480	86.398	17.790	8.080	1.00	24.64	A	O
ATOM	2298	N	PHE	481	84.378	18.023	9.071	1.00	23.87	A	C
ATOM	2299	CA	PHE	481	84.113	16.594	9.170	1.00	23.87	A	C
ATOM	2300	CB	PHE	481	82.662	16.376	9.563	1.00	24.54	A	C
ATOM	2301	CG	PHE	481	82.422	16.538	11.026	1.00	27.07	A	C
ATOM	2302	CD1	PHE	481	83.412	17.095	11.846	1.00	27.72	A	C
ATOM	2303	CD2	PHE	481	81.249	16.076	11.612	1.00	27.49	A	C
ATOM	2304	CE1	PHE	481	83.241	17.184	13.234	1.00	27.55	A	C
ATOM	2305	CE2	PHE	481	81.069	16.161	12.999	1.00	27.57	A	C
ATOM	2306	CZ	PHE	481	82.071	16.715	13.809	1.00	27.22	A	C
ATOM	2307	C	PHE	481	84.402	15.897	7.858	1.00	24.01	A	C
ATOM	2308	O	PHE	481	85.319	15.071	7.751	1.00	23.99	A	O
ATOM	2309	N	ILE	482	83.623	16.273	6.853	1.00	23.83	A	N
ATOM	2310	CA	ILE	482	83.770	15.744	5.507	1.00	22.78	A	C
ATOM	2311	CB	ILE	482	83.006	16.598	4.536	1.00	22.98	A	C
ATOM	2312	CG2	ILE	482	83.283	16.161	3.118	1.00	21.78	A	C
ATOM	2313	CG1	ILE	482	81.532	16.544	4.899	1.00	23.70	A	C
ATOM	2314	CD1	ILE	482	80.803	17.796	4.530	1.00	26.26	A	C

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ATOM	2315	C	ILE	482	85.218	15.840	5.120	1.00	21.95	A	C
ATOM	2316	O	ILE	482	85.795	14.864	4.680	1.00	21.12	A	O
ATOM	2317	N	ASP	483	85.799	17.022	5.316	1.00	22.05	A	N
ATOM	2318	CA	ASP	483	87.195	17.262	4.996	1.00	22.71	A	C
ATOM	2319	CB	ASP	483	87.684	18.580	5.632	1.00	22.14	A	C
ATOM	2320	CG	ASP	483	88.991	19.110	5.002	1.00	22.36	A	C
ATOM	2321	OD1	ASP	483	89.685	18.362	4.266	1.00	21.98	A	O
ATOM	2322	OD2	ASP	483	89.321	20.297	5.236	1.00	21.70	A	O
ATOM	2323	C	ASP	483	88.013	16.093	5.531	1.00	23.36	A	C
ATOM	2324	O	ASP	483	88.479	15.237	4.754	1.00	22.85	A	O
ATOM	2325	N	ALA	484	88.076	15.995	6.857	1.00	24.38	A	N
ATOM	2326	CA	ALA	484	88.859	14.945	7.504	1.00	25.98	A	C
ATOM	2327	CB	ALA	484	89.098	15.281	8.970	1.00	26.04	A	C
ATOM	2328	C	ALA	484	88.263	13.560	7.390	1.00	26.27	A	C
ATOM	2329	O	ALA	484	88.776	12.702	6.667	1.00	26.49	A	O
ATOM	2330	N	LEU	485	87.154	13.360	8.086	1.00	26.42	A	N
ATOM	2331	CA	LEU	485	86.494	12.069	8.127	1.00	26.69	A	C
ATOM	2332	CB	LEU	485	85.379	12.111	9.161	1.00	26.99	A	C
ATOM	2333	CG	LEU	485	86.075	12.512	10.469	1.00	27.36	A	C
ATOM	2334	CD1	LEU	485	85.100	12.934	11.551	1.00	27.72	A	C
ATOM	2335	CD2	LEU	485	86.971	11.366	10.923	1.00	27.28	A	C
ATOM	2336	C	LEU	485	86.013	11.566	6.791	1.00	26.39	A	C
ATOM	2337	O	LEU	485	85.579	10.411	6.668	1.00	26.68	A	O
ATOM	2338	N	ALA	486	86.161	12.416	5.780	1.00	25.98	A	N
ATOM	2339	CA	ALA	486	85.759	12.075	4.426	1.00	25.72	A	C
ATOM	2340	CB	ALA	486	86.656	10.972	3.867	1.00	25.49	A	C
ATOM	2341	C	ALA	486	84.313	11.633	4.417	1.00	25.01	A	C
ATOM	2342	O	ALA	486	83.965	10.647	3.771	1.00	25.47	A	O
ATOM	2343	N	LEU	487	83.473	12.342	5.162	1.00	24.35	A	N
ATOM	2344	CA	LEU	487	82.070	11.968	5.206	1.00	23.95	A	C
ATOM	2345	CB	LEU	487	81.357	12.676	6.346	1.00	24.20	A	C
ATOM	2346	CG	LEU	487	81.952	12.378	7.724	1.00	25.31	A	C
ATOM	2347	CD1	LEU	487	80.952	12.797	8.805	1.00	24.94	A	C
ATOM	2348	CD2	LEU	487	82.292	10.885	7.845	1.00	25.09	A	C
ATOM	2349	C	LEU	487	81.423	12.295	3.883	1.00	23.46	A	C
ATOM	2350	O	LEU	487	81.964	13.072	3.106	1.00	23.88	A	O
ATOM	2351	N	ARG	488	80.305	11.650	3.589	1.00	22.76	A	N
ATOM	2352	CA	ARG	488	79.620	11.909	2.332	1.00	22.76	A	C
ATOM	2353	CB	ARG	488	78.905	10.644	1.830	1.00	23.93	A	C
ATOM	2354	CG	ARG	488	79.834	9.565	1.311	1.00	25.86	A	C
ATOM	2355	CD	ARG	488	79.071	8.500	0.522	1.00	28.39	A	C
ATOM	2356	NE	ARG	488	79.922	7.374	0.118	1.00	30.22	A	N
ATOM	2357	CZ	ARG	488	80.094	6.258	0.833	1.00	31.09	A	C
ATOM	2358	NH1	ARG	488	79.473	6.096	2.004	1.00	31.27	A	N
ATOM	2359	NH2	ARG	488	80.903	5.303	0.389	1.00	31.97	A	N
ATOM	2360	C	ARG	488	78.629	13.077	2.438	1.00	22.34	A	C
ATOM	2361	O	ARG	488	78.185	13.433	3.538	1.00	21.92	A	O
ATOM	2362	N	ALA	489	78.292	13.648	1.280	1.00	21.81	A	N
ATOM	2363	CA	ALA	489	77.357	14.760	1.164	1.00	22.28	A	C
ATOM	2364	CB	ALA	489	76.731	14.740	-0.204	1.00	22.57	A	C
ATOM	2365	C	ALA	489	76.269	14.784	2.239	1.00	23.08	A	C
ATOM	2366	O	ALA	489	76.258	15.653	3.104	1.00	23.63	A	O
ATOM	2367	N	GLY	490	75.347	13.836	2.183	1.00	24.05	A	N
ATOM	2368	CA	GLY	490	74.295	13.796	3.183	1.00	25.50	A	C
ATOM	2369	C	GLY	490	72.973	14.369	2.727	1.00	26.89	A	C
ATOM	2370	O	GLY	490	72.434	15.264	3.370	1.00	26.03	A	O
ATOM	2371	N	ASN	491	72.457	13.854	1.614	1.00	29.49	A	N
ATOM	2372	CA	ASN	491	71.173	14.303	1.067	1.00	32.67	A	C
ATOM	2373	CB	ASN	491	70.928	13.679	-0.310	1.00	33.76	A	C
ATOM	2374	CG	ASN	491	71.812	14.265	-1.382	1.00	35.04	A	C
ATOM	2375	OD1	ASN	491	71.895	15.491	-1.533	1.00	35.60	A	O
ATOM	2376	ND2	ASN	491	72.474	13.394	-2.148	1.00	35.48	A	N

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ATOM	2377	C	ASN	491	70.007	13.940	1.992	1.00	34.09	A	C
ATOM	2378	O	ASN	491	70.018	12.888	2.650	1.00	34.60	A	O
ATOM	2379	N	GLU	492	68.996	14.802	2.027	1.00	35.60	A	N
ATOM	2380	CA	GLU	492	67.845	14.553	2.874	1.00	37.50	A	C
ATOM	2381	CB	GLU	492	67.097	15.860	3.207	1.00	39.03	A	C
ATOM	2382	CG	GLU	492	67.639	17.174	2.565	1.00	41.94	A	C
ATOM	2383	CD	GLU	492	69.013	17.646	3.091	1.00	43.19	A	C
ATOM	2384	OE1	GLU	492	69.758	18.298	2.314	1.00	43.69	A	O
ATOM	2385	OE2	GLU	492	69.343	17.387	4.273	1.00	43.17	A	O
ATOM	2386	C	GLU	492	66.941	13.540	2.180	1.00	38.18	A	C
ATOM	2387	O	GLU	492	66.661	13.665	0.992	1.00	37.88	A	O
ATOM	2388	N	LYS	493	66.524	12.515	2.919	1.00	39.36	A	N
ATOM	2389	CA	LYS	493	65.674	11.464	2.364	1.00	41.22	A	C
ATOM	2390	CB	LYS	493	66.334	10.100	2.543	1.00	41.25	A	C
ATOM	2391	CG	LYS	493	67.684	9.996	1.850	1.00	41.71	A	C
ATOM	2392	CD	LYS	493	68.055	8.550	1.527	1.00	41.61	A	C
ATOM	2393	CE	LYS	493	68.288	7.701	2.771	1.00	40.44	A	C
ATOM	2394	NZ	LYS	493	68.695	6.307	2.400	1.00	38.77	A	N
ATOM	2395	C	LYS	493	64.259	11.425	2.917	1.00	42.20	A	C
ATOM	2396	O	LYS	493	64.041	11.692	4.096	1.00	42.00	A	O
ATOM	2397	N	GLU	494	63.315	11.024	2.066	1.00	43.71	A	N
ATOM	2398	CA	GLU	494	61.899	10.957	2.426	1.00	45.54	A	C
ATOM	2399	CB	GLU	494	61.041	10.803	1.171	1.00	47.64	A	C
ATOM	2400	CG	GLU	494	59.578	11.205	1.359	1.00	51.65	A	C
ATOM	2401	CD	GLU	494	58.747	11.053	0.080	1.00	53.96	A	C
ATOM	2402	OE1	GLU	494	59.323	11.152	-1.036	1.00	54.73	A	O
ATOM	2403	OE2	GLU	494	57.514	10.830	0.195	1.00	54.89	A	O
ATOM	2404	C	GLU	494	61.591	9.850	3.429	1.00	45.64	A	C
ATOM	2405	O	GLU	494	61.417	8.682	3.066	1.00	44.94	A	O
ATOM	2406	N	ALA	495	61.483	10.267	4.687	1.00	46.24	A	N
ATOM	2407	CA	ALA	495	61.218	9.407	5.833	1.00	47.20	A	C
ATOM	2408	CB	ALA	495	61.003	10.273	7.070	1.00	47.67	A	C
ATOM	2409	C	ALA	495	60.060	8.425	5.682	1.00	47.57	A	C
ATOM	2410	O	ALA	495	59.035	8.556	6.355	1.00	48.26	A	O
ATOM	2411	N	GLY	496	60.246	7.409	4.849	1.00	47.05	A	N
ATOM	2412	CA	GLY	496	59.198	6.430	4.652	1.00	45.98	A	C
ATOM	2413	C	GLY	496	59.597	5.487	3.550	1.00	45.29	A	C
ATOM	2414	O	GLY	496	60.003	4.362	3.800	1.00	45.68	A	O
ATOM	2415	N	GLU	497	59.519	5.964	2.320	1.00	44.63	A	N
ATOM	2416	CA	GLU	497	59.877	5.160	1.166	1.00	44.14	A	C
ATOM	2417	CB	GLU	497	59.423	5.859	-0.123	1.00	46.02	A	C
ATOM	2418	CG	GLU	497	58.912	7.304	0.048	1.00	49.21	A	C
ATOM	2419	CD	GLU	497	57.613	7.410	0.867	1.00	51.40	A	C
ATOM	2420	OE1	GLU	497	56.542	6.985	0.373	1.00	52.68	A	O
ATOM	2421	OE2	GLU	497	57.664	7.929	2.008	1.00	51.71	A	O
ATOM	2422	C	GLU	497	61.386	4.939	1.158	1.00	43.23	A	C
ATOM	2423	O	GLU	497	61.918	4.127	0.401	1.00	42.47	A	O
ATOM	2424	N	THR	498	62.063	5.650	2.047	1.00	42.29	A	N
ATOM	2425	CA	THR	498	63.501	5.561	2.156	1.00	41.43	A	C
ATOM	2426	CB	THR	498	64.106	6.937	2.466	1.00	42.47	A	C
ATOM	2427	OG1	THR	498	65.532	6.835	2.414	1.00	43.37	A	O
ATOM	2428	CG2	THR	498	63.703	7.401	3.869	1.00	43.73	A	C
ATOM	2429	C	THR	498	63.933	4.623	3.268	1.00	40.31	A	C
ATOM	2430	O	THR	498	63.143	4.278	4.152	1.00	39.90	A	O
ATOM	2431	N	ALA	499	65.209	4.242	3.221	1.00	38.87	A	N
ATOM	2432	CA	ALA	499	65.816	3.383	4.233	1.00	37.03	A	C
ATOM	2433	CB	ALA	499	66.654	2.290	3.575	1.00	36.74	A	C
ATOM	2434	C	ALA	499	66.699	4.335	5.028	1.00	35.52	A	C
ATOM	2435	O	ALA	499	67.776	4.711	4.574	1.00	35.84	A	O
ATOM	2436	N	ASP	500	66.204	4.754	6.190	1.00	33.86	A	N
ATOM	2437	CA	ASP	500	66.891	5.703	7.071	1.00	32.30	A	C
ATOM	2438	CB	ASP	500	66.289	5.627	8.483	1.00	32.58	A	C

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ATOM	2439	CG	ASP	500	66.731	6.784	9.387	1.00	33.51	A	C
ATOM	2440	OD1	ASP	500	67.590	7.600	8.966	1.00	34.61	A	O
ATOM	2441	OD2	ASP	500	66.201	6.891	10.521	1.00	32.85	A	O
ATOM	2442	C	ASP	500	68.412	5.579	7.179	1.00	30.83	A	C
ATOM	2443	O	ASP	500	68.911	4.772	7.951	1.00	31.70	A	O
ATOM	2444	N	THR	501	69.142	6.400	6.432	1.00	28.33	A	N
ATOM	2445	CA	THR	501	70.601	6.403	6.495	1.00	26.30	A	C
ATOM	2446	CB	THR	501	71.252	5.666	5.314	1.00	25.18	A	C
ATOM	2447	OG1	THR	501	70.871	6.285	4.086	1.00	25.66	A	O
ATOM	2448	CG2	THR	501	70.839	4.223	5.286	1.00	25.48	A	C
ATOM	2449	C	THR	501	71.037	7.866	6.480	1.00	26.40	A	C
ATOM	2450	O	THR	501	70.579	8.650	5.647	1.00	27.65	A	O
ATOM	2451	N	VAL	502	71.905	8.252	7.407	1.00	25.14	A	N
ATOM	2452	CA	VAL	502	72.328	9.645	7.462	1.00	23.70	A	C
ATOM	2453	CB	VAL	502	72.363	10.168	8.890	1.00	24.34	A	C
ATOM	2454	CG1	VAL	502	70.954	10.144	9.479	1.00	25.06	A	C
ATOM	2455	CG2	VAL	502	73.329	9.334	9.723	1.00	23.57	A	C
ATOM	2456	C	VAL	502	73.662	9.935	6.828	1.00	22.89	A	C
ATOM	2457	O	VAL	502	74.441	9.020	6.511	1.00	22.67	A	O
ATOM	2458	N	GLY	503	73.920	11.236	6.703	1.00	21.50	A	N
ATOM	2459	CA	GLY	503	75.145	11.739	6.107	1.00	20.32	A	C
ATOM	2460	C	GLY	503	75.573	12.999	6.828	1.00	19.37	A	C
ATOM	2461	O	GLY	503	74.807	13.521	7.647	1.00	18.96	A	O
ATOM	2462	N	CYS	504	76.749	13.523	6.479	1.00	18.61	A	N
ATOM	2463	CA	CYS	504	77.291	14.701	7.147	1.00	18.74	A	C
ATOM	2464	CB	CYS	504	78.460	15.308	6.379	1.00	18.76	A	C
ATOM	2465	SG	CYS	504	79.406	16.526	7.356	1.00	19.60	A	S
ATOM	2466	C	CYS	504	76.263	15.763	7.453	1.00	18.83	A	C
ATOM	2467	O	CYS	504	76.095	16.129	8.618	1.00	18.74	A	O
ATOM	2468	N	CYS	505	75.553	16.234	6.429	1.00	19.39	A	N
ATOM	2469	CA	CYS	505	74.532	17.256	6.646	1.00	21.02	A	C
ATOM	2470	CB	CYS	505	74.123	17.933	5.327	1.00	21.32	A	C
ATOM	2471	SG	CYS	505	75.427	18.804	4.383	1.00	23.23	A	S
ATOM	2472	C	CYS	505	73.296	16.611	7.279	1.00	21.74	A	C
ATOM	2473	O	CYS	505	72.653	17.186	8.171	1.00	22.31	A	O
ATOM	2474	N	SER	506	72.984	15.397	6.841	1.00	22.15	A	N
ATOM	2475	CA	SER	506	71.802	14.708	7.336	1.00	22.12	A	C
ATOM	2476	CB	SER	506	71.271	13.735	6.278	1.00	23.41	A	C
ATOM	2477	OG	SER	506	72.264	12.804	5.877	1.00	22.54	A	O
ATOM	2478	C	SER	506	71.976	14.008	8.669	1.00	22.23	A	C
ATOM	2479	O	SER	506	71.135	13.198	9.054	1.00	22.37	A	O
ATOM	2480	N	LEU	507	73.044	14.335	9.389	1.00	22.04	A	N
ATOM	2481	CA	LEU	507	73.277	13.724	10.691	1.00	22.77	A	C
ATOM	2482	CB	LEU	507	74.665	14.076	11.202	1.00	20.60	A	C
ATOM	2483	CG	LEU	507	75.885	13.443	10.562	1.00	18.46	A	C
ATOM	2484	CD1	LEU	507	77.089	13.780	11.414	1.00	17.80	A	C
ATOM	2485	CD2	LEU	507	75.711	11.940	10.478	1.00	18.56	A	C
ATOM	2486	C	LEU	507	72.271	14.184	11.744	1.00	24.63	A	C
ATOM	2487	O	LEU	507	71.894	15.359	11.786	1.00	25.66	A	O
ATOM	2488	N	ARG	508	71.808	13.252	12.567	1.00	26.04	A	N
ATOM	2489	CA	ARG	508	70.899	13.602	13.651	1.00	27.60	A	C
ATOM	2490	CB	ARG	508	69.765	12.596	13.802	1.00	29.17	A	C
ATOM	2491	CG	ARG	508	68.728	12.647	12.724	1.00	29.83	A	C
ATOM	2492	CD	ARG	508	67.467	11.938	13.194	1.00	31.10	A	C
ATOM	2493	NE	ARG	508	67.647	10.506	13.433	1.00	32.27	A	N
ATOM	2494	CZ	ARG	508	67.868	9.604	12.477	1.00	33.11	A	C
ATOM	2495	NH1	ARG	508	67.950	9.989	11.206	1.00	33.36	A	N
ATOM	2496	NH2	ARG	508	67.974	8.311	12.785	1.00	33.17	A	N
ATOM	2497	C	ARG	508	71.765	13.577	14.898	1.00	27.88	A	C
ATOM	2498	O	ARG	508	72.822	12.935	14.905	1.00	27.39	A	O
ATOM	2499	N	VAL	509	71.288	14.211	15.966	1.00	29.03	A	N
ATOM	2500	CA	VAL	509	72.048	14.297	17.213	1.00	30.10	A	C

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ATOM	2501	CB	VAL	509	71.373	15.256	18.238	1.00	30.29	A	C
ATOM	2502	CG1	VAL	509	70.894	16.541	17.544	1.00	30.32	A	C
ATOM	2503	CG2	VAL	509	70.235	14.577	18.945	1.00	30.32	A	C
ATOM	2504	C	VAL	509	72.391	12.970	17.888	1.00	29.80	A	C
ATOM	2505	O	VAL	509	73.542	12.758	18.277	1.00	30.00	A	O
ATOM	2506	N	GLU	510	71.414	12.065	17.980	1.00	30.42	A	N
ATOM	2507	CA	GLU	510	71.626	10.764	18.623	1.00	30.63	A	C
ATOM	2508	CB	GLU	510	70.370	9.869	18.507	1.00	31.44	A	C
ATOM	2509	CG	GLU	510	70.203	9.138	17.170	1.00	33.32	A	C
ATOM	2510	CD	GLU	510	68.880	9.454	16.484	1.00	34.99	A	C
ATOM	2511	OE1	GLU	510	67.978	8.581	16.470	1.00	35.50	A	O
ATOM	2512	OE2	GLU	510	68.744	10.580	15.949	1.00	35.73	A	O
ATOM	2513	C	GLU	510	72.843	10.038	18.049	1.00	29.93	A	C
ATOM	2514	O	GLU	510	73.506	9.273	18.759	1.00	31.20	A	O
ATOM	2515	N	HIS	511	73.160	10.336	16.787	1.00	28.23	A	N
ATOM	2516	CA	HIS	511	74.281	9.710	16.088	1.00	26.06	A	C
ATOM	2517	CB	HIS	511	74.249	10.073	14.611	1.00	24.26	A	C
ATOM	2518	CG	HIS	511	73.090	9.470	13.888	1.00	23.34	A	C
ATOM	2519	CD2	HIS	511	72.879	8.211	13.439	1.00	22.45	A	C
ATOM	2520	ND1	HIS	511	71.957	10.186	13.574	1.00	22.91	A	N
ATOM	2521	CE1	HIS	511	71.099	9.392	12.959	1.00	22.89	A	C
ATOM	2522	NE2	HIS	511	71.634	8.189	12.863	1.00	22.86	A	N
ATOM	2523	C	HIS	511	75.664	9.959	16.661	1.00	25.51	A	C
ATOM	2524	O	HIS	511	76.609	9.224	16.335	1.00	26.39	A	O
ATOM	2525	N	ILE	512	75.779	10.953	17.543	1.00	24.22	A	N
ATOM	2526	CA	ILE	512	77.066	11.272	18.152	1.00	22.43	A	C
ATOM	2527	CB	ILE	512	77.682	12.545	17.572	1.00	22.05	A	C
ATOM	2528	CG2	ILE	512	78.301	12.256	16.213	1.00	22.47	A	C
ATOM	2529	CG1	ILE	512	76.640	13.673	17.564	1.00	21.83	A	C
ATOM	2530	CD1	ILE	512	77.177	15.013	17.112	1.00	20.91	A	C
ATOM	2531	C	ILE	512	77.057	11.467	19.643	1.00	21.50	A	C
ATOM	2532	O	ILE	512	76.043	11.821	20.245	1.00	21.09	A	O
ATOM	2533	N	ASN	513	78.331	11.259	20.218	1.00	21.31	A	N
ATOM	2534	CA	ASN	513	78.457	11.432	21.644	1.00	21.68	A	C
ATOM	2535	CB	ASN	513	78.477	10.104	22.371	1.00	22.14	A	C
ATOM	2536	CG	ASN	513	77.154	9.408	22.297	1.00	23.57	A	C
ATOM	2537	OD1	ASN	513	76.353	9.482	23.236	1.00	23.78	A	O
ATOM	2538	ND2	ASN	513	76.878	8.775	21.146	1.00	23.10	A	N
ATOM	2539	C	ASN	513	79.791	12.093	21.763	1.00	21.86	A	C
ATOM	2540	O	ASN	513	80.701	11.865	20.955	1.00	21.13	A	O
ATOM	2541	N	LEU	514	79.911	12.913	22.788	1.00	23.34	A	N
ATOM	2542	CA	LEU	514	81.133	13.657	22.991	1.00	25.19	A	C
ATOM	2543	CB	LEU	514	80.817	15.149	22.857	1.00	26.04	A	C
ATOM	2544	CG	LEU	514	80.197	15.448	21.484	1.00	25.55	A	C
ATOM	2545	CD1	LEU	514	79.693	16.891	21.341	1.00	25.30	A	C
ATOM	2546	CD2	LEU	514	81.250	15.124	20.443	1.00	25.32	A	C
ATOM	2547	C	LEU	514	81.814	13.333	24.310	1.00	25.67	A	C
ATOM	2548	O	LEU	514	81.167	13.221	25.364	1.00	25.19	A	O
ATOM	2549	N	HIS	515	83.123	13.146	24.230	1.00	26.24	A	N
ATOM	2550	CA	HIS	515	83.902	12.818	25.401	1.00	27.22	A	C
ATOM	2551	CB	HIS	515	84.366	11.366	25.313	1.00	28.63	A	C
ATOM	2552	CG	HIS	515	83.247	10.388	25.096	1.00	30.37	A	C
ATOM	2553	CD2	HIS	515	82.593	9.573	25.960	1.00	30.79	A	C
ATOM	2554	ND1	HIS	515	82.663	10.185	23.862	1.00	30.09	A	N
ATOM	2555	CE1	HIS	515	81.697	9.289	23.976	1.00	29.45	A	C
ATOM	2556	NE2	HIS	515	81.633	8.901	25.238	1.00	29.89	A	N
ATOM	2557	C	HIS	515	85.073	13.770	25.444	1.00	27.36	A	C
ATOM	2558	O	HIS	515	85.936	13.744	24.577	1.00	27.94	A	O
ATOM	2559	N	PRO	516	85.103	14.645	26.454	1.00	27.31	A	N
ATOM	2560	CD	PRO	516	84.146	14.614	27.567	1.00	26.91	A	C
ATOM	2561	CA	PRO	516	86.137	15.660	26.690	1.00	27.40	A	C
ATOM	2562	C	PRO	516	85.646	16.351	27.950	1.00	27.27	A	C



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ATOM	2563	CG	PRO	516	84.944	15.239	28.673	1.00	27.80	A	C
ATOM	2564	C	PRO	516	87.503	15.063	26.911	1.00	27.46	A	C
ATOM	2565	O	PRO	516	88.504	15.744	26.772	1.00	28.10	A	O
ATOM	2566	N	GLU	517	87.518	13.808	27.333	1.00	27.81	A	N
ATOM	2567	CA	GLU	517	88.732	13.050	27.580	1.00	29.57	A	C
ATOM	2568	CB	GLU	517	89.156	13.160	29.051	1.00	31.66	A	C
ATOM	2569	CG	GLU	517	89.587	14.563	29.516	1.00	34.78	A	C
ATOM	2570	CD	GLU	517	89.643	14.734	31.049	1.00	36.25	A	C
ATOM	2571	OE1	GLU	517	89.037	13.923	31.793	1.00	37.49	A	O
ATOM	2572	OE2	GLU	517	90.273	15.715	31.512	1.00	37.33	A	O
ATOM	2573	C	GLU	517	88.246	11.643	27.303	1.00	29.55	A	C
ATOM	2574	O	GLU	517	87.091	11.346	27.579	1.00	30.61	A	O
ATOM	2575	N	LEU	518	89.095	10.785	26.747	1.00	29.26	A	N
ATOM	2576	CA	LEU	518	88.706	9.410	26.439	1.00	29.14	A	C
ATOM	2577	CB	LEU	518	87.419	9.397	25.621	1.00	29.38	A	C
ATOM	2578	CG	LEU	518	86.952	8.070	25.027	1.00	30.24	A	C
ATOM	2579	CD1	LEU	518	85.505	7.783	25.437	1.00	29.90	A	C
ATOM	2580	CD2	LEU	518	87.097	8.125	23.503	1.00	30.19	A	C
ATOM	2581	C	LEU	518	89.797	8.718	25.656	1.00	30.00	A	C
ATOM	2582	O	LEU	518	90.333	9.294	24.711	1.00	30.15	A	O
ATOM	2583	N	ASP	519	90.080	7.465	26.010	1.00	30.92	A	N
ATOM	2584	CA	ASP	519	91.128	6.687	25.347	1.00	32.12	A	C
ATOM	2585	CB	ASP	519	90.741	6.327	23.905	1.00	33.53	A	C
ATOM	2586	CG	ASP	519	89.699	5.212	23.823	1.00	36.35	A	C
ATOM	2587	OD1	ASP	519	88.653	5.433	23.170	1.00	37.31	A	O
ATOM	2588	OD2	ASP	519	89.927	4.106	24.375	1.00	37.28	A	O
ATOM	2589	C	ASP	519	92.417	7.489	25.324	1.00	32.32	A	C
ATOM	2590	O	ASP	519	93.179	7.426	24.366	1.00	31.89	A	O
ATOM	2591	N	GLY	520	92.620	8.296	26.355	1.00	33.36	A	N
ATOM	2592	CA	GLY	520	93.821	9.098	26.420	1.00	36.16	A	C
ATOM	2593	C	GLY	520	93.769	10.412	25.660	1.00	38.16	A	C
ATOM	2594	O	GLY	520	94.618	11.273	25.882	1.00	39.20	A	O
ATOM	2595	N	GLN	521	92.812	10.577	24.752	1.00	39.49	A	N
ATOM	2596	CA	GLN	521	92.715	11.828	24.002	1.00	40.72	A	C
ATOM	2597	CB	GLN	521	92.566	11.564	22.501	1.00	41.42	A	C
ATOM	2598	CG	GLN	521	93.875	11.715	21.705	1.00	42.78	A	C
ATOM	2599	CD	GLN	521	94.450	10.383	21.211	1.00	43.85	A	C
ATOM	2600	OE1	GLN	521	93.811	9.333	21.330	1.00	44.23	A	O
ATOM	2601	NE2	GLN	521	95.660	10.429	20.642	1.00	43.93	A	N
ATOM	2602	C	GLN	521	91.600	12.740	24.507	1.00	41.08	A	C
ATOM	2603	O	GLN	521	90.654	12.283	25.144	1.00	41.11	A	O
ATOM	2604	N	GLU	522	91.727	14.035	24.224	1.00	42.05	A	N
ATOM	2605	CA	GLU	522	90.748	15.030	24.661	1.00	43.21	A	C
ATOM	2606	CB	GLU	522	91.453	16.170	25.402	1.00	45.52	A	C
ATOM	2607	CG	GLU	522	92.646	16.783	24.667	1.00	48.45	A	C
ATOM	2608	CD	GLU	522	93.089	18.120	25.272	1.00	50.71	A	C
ATOM	2609	OE1	GLU	522	93.718	18.927	24.540	1.00	51.77	A	O
ATOM	2610	OE2	GLU	522	92.796	18.372	26.470	1.00	51.83	A	O
ATOM	2611	C	GLU	522	89.841	15.601	23.563	1.00	42.63	A	C
ATOM	2612	O	GLU	522	90.271	15.783	22.425	1.00	43.21	A	O
ATOM	2613	N	TYR	523	88.607	15.940	23.938	1.00	41.30	A	N
ATOM	2614	CA	TYR	523	87.608	16.480	23.011	1.00	39.93	A	C
ATOM	2615	CB	TYR	523	88.097	17.765	22.327	1.00	41.75	A	C
ATOM	2616	CG	TYR	523	88.711	18.831	23.210	1.00	43.43	A	C
ATOM	2617	CD1	TYR	523	87.939	19.560	24.116	1.00	44.45	A	C
ATOM	2618	CE1	TYR	523	88.492	20.604	24.856	1.00	44.72	A	C
ATOM	2619	CD2	TYR	523	90.056	19.171	23.073	1.00	44.02	A	C
ATOM	2620	CE2	TYR	523	90.616	20.208	23.801	1.00	44.49	A	C
ATOM	2621	CZ	TYR	523	89.834	20.919	24.688	1.00	45.53	A	C
ATOM	2622	OH	TYR	523	90.409	21.945	25.405	1.00	48.28	A	O
ATOM	2623	C	TYR	523	87.311	15.427	21.927	1.00	38.52	A	C
ATOM	2624	O	TYR	523	87.435	15.689	20.718	1.00	39.51	A	O

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ATOM	2625	N	VAL	524	86.904	14.241	22.362	1.00	35.15	A	N
ATOM	2626	CA	VAL	524	86.620	13.147	21.445	1.00	31.52	A	C
ATOM	2627	CB	VAL	524	87.003	11.803	22.087	1.00	31.49	A	C
ATOM	2628	CG1	VAL	524	86.756	10.658	21.111	1.00	31.20	A	C
ATOM	2629	CG2	VAL	524	88.463	11.842	22.543	1.00	30.69	A	C
ATOM	2630	C	VAL	524	85.169	13.072	20.987	1.00	29.46	A	C
ATOM	2631	O	VAL	524	84.248	13.116	21.815	1.00	29.23	A	O
ATOM	2632	N	VAL	525	84.981	12.955	19.669	1.00	27.23	A	N
ATOM	2633	CA	VAL	525	83.648	12.831	19.073	1.00	24.64	A	C
ATOM	2634	CB	VAL	525	83.437	13.761	17.893	1.00	23.45	A	C
ATOM	2635	CG1	VAL	525	82.029	13.585	17.362	1.00	22.18	A	C
ATOM	2636	CG2	VAL	525	83.690	15.197	18.307	1.00	22.98	A	C
ATOM	2637	C	VAL	525	83.440	11.411	18.591	1.00	24.27	A	C
ATOM	2638	O	VAL	525	84.125	10.929	17.694	1.00	23.79	A	O
ATOM	2639	N	GLU	526	82.466	10.760	19.197	1.00	24.10	A	N
ATOM	2640	CA	GLU	526	82.155	9.382	18.894	1.00	24.89	A	C
ATOM	2641	CB	GLU	526	81.735	8.668	20.172	1.00	25.97	A	C
ATOM	2642	CG	GLU	526	81.460	7.192	20.006	1.00	27.66	A	C
ATOM	2643	CD	GLU	526	80.967	6.570	21.296	1.00	29.31	A	C
ATOM	2644	OE1	GLU	526	79.913	7.029	21.803	1.00	30.26	A	O
ATOM	2645	OE2	GLU	526	81.636	5.636	21.803	1.00	29.94	A	O
ATOM	2646	C	GLU	526	81.058	9.279	17.863	1.00	24.82	A	C
ATOM	2647	O	GLU	526	79.893	9.575	18.140	1.00	26.07	A	O
ATOM	2648	N	PHE	527	81.438	8.801	16.688	1.00	24.47	A	N
ATOM	2649	CA	PHE	527	80.523	8.645	15.572	1.00	23.16	A	C
ATOM	2650	CB	PHE	527	81.229	8.991	14.266	1.00	22.71	A	C
ATOM	2651	CG	PHE	527	81.577	10.418	14.135	1.00	21.62	A	C
ATOM	2652	CD1	PHE	527	82.875	10.847	14.342	1.00	20.81	A	C
ATOM	2653	CD2	PHE	527	80.600	11.345	13.801	1.00	20.99	A	C
ATOM	2654	CE1	PHE	527	83.193	12.180	14.216	1.00	20.40	A	C
ATOM	2655	CE2	PHE	527	80.911	12.689	13.670	1.00	20.67	A	C
ATOM	2656	CZ	PHE	527	82.216	13.108	13.879	1.00	20.84	A	C
ATOM	2657	C	PHE	527	79.938	7.265	15.380	1.00	23.07	A	C
ATOM	2658	O	PHE	527	80.650	6.268	15.224	1.00	22.23	A	O
ATOM	2659	N	ASP	528	78.624	7.212	15.360	1.00	23.12	A	N
ATOM	2660	CA	ASP	528	77.995	5.960	15.067	1.00	23.16	A	C
ATOM	2661	CB	ASP	528	77.769	5.105	16.297	1.00	24.80	A	C
ATOM	2662	CG	ASP	528	77.710	3.624	15.946	1.00	26.37	A	C
ATOM	2663	OD1	ASP	528	77.796	3.296	14.736	1.00	26.14	A	O
ATOM	2664	OD2	ASP	528	77.599	2.788	16.864	1.00	27.40	A	O
ATOM	2665	C	ASP	528	76.712	6.213	14.316	1.00	22.61	A	C
ATOM	2666	O	ASP	528	75.893	7.043	14.728	1.00	22.65	A	O
ATOM	2667	N	PHE	529	76.591	5.541	13.174	1.00	21.69	A	N
ATOM	2668	CA	PHE	529	75.426	5.668	12.309	1.00	21.26	A	C
ATOM	2669	CB	PHE	529	75.214	7.132	11.944	1.00	21.27	A	C
ATOM	2670	CG	PHE	529	76.320	7.715	11.115	1.00	19.93	A	C
ATOM	2671	CD1	PHE	529	76.323	7.562	9.728	1.00	19.20	A	C
ATOM	2672	CD2	PHE	529	77.368	8.390	11.718	1.00	19.20	A	C
ATOM	2673	CE1	PHE	529	77.356	8.070	8.964	1.00	19.30	A	C
ATOM	2674	CE2	PHE	529	78.413	8.906	10.958	1.00	18.88	A	C
ATOM	2675	CZ	PHE	529	78.409	8.746	9.581	1.00	19.38	A	C
ATOM	2676	C	PHE	529	75.673	4.913	11.015	1.00	21.29	A	C
ATOM	2677	O	PHE	529	76.821	4.774	10.586	1.00	21.00	A	O
ATOM	2678	N	LEU	530	74.596	4.562	10.322	1.00	21.21	A	N
ATOM	2679	CA	LEU	530	74.739	3.855	9.056	1.00	21.26	A	C
ATOM	2680	CB	LEU	530	73.701	2.764	8.920	1.00	21.97	A	C
ATOM	2681	CG	LEU	530	73.680	1.849	10.122	1.00	22.51	A	C
ATOM	2682	CD1	LEU	530	72.780	2.478	11.202	1.00	23.43	A	C
ATOM	2683	CD2	LEU	530	73.154	0.489	9.676	1.00	23.42	A	C
ATOM	2684	C	LEU	530	74.635	4.777	7.863	1.00	20.28	A	C
ATOM	2685	O	LEU	530	73.644	5.482	7.685	1.00	20.23	A	O
ATOM	2686	N	GLY	531	75.671	4.756	7.043	1.00	19.80	A	N

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ATOM	2687	CA	GLY	531	75.679	5.584	5.864	1.00	20.38	A	C
ATOM	2688	C	GLY	531	75.000	4.879	4.710	1.00	20.89	A	C
ATOM	2689	O	GLY	531	74.096	4.056	4.911	1.00	20.36	A	O
ATOM	2690	N	LYS	532	75.456	5.199	3.500	1.00	21.40	A	N
ATOM	2691	CA	LYS	532	74.908	4.625	2.287	1.00	21.95	A	C
ATOM	2692	CB	LYS	532	75.765	5.002	1.086	1.00	23.04	A	C
ATOM	2693	CG	LYS	532	75.209	4.533	-0.243	1.00	24.12	A	C
ATOM	2694	CD	LYS	532	76.272	4.597	-1.339	1.00	25.37	A	C
ATOM	2695	CE	LYS	532	75.755	4.049	-2.685	1.00	26.65	A	C
ATOM	2696	NZ	LYS	532	76.800	4.002	-3.766	1.00	25.18	A	N
ATOM	2697	C	LYS	532	74.822	3.116	2.414	1.00	21.74	A	C
ATOM	2698	O	LYS	532	75.756	2.476	2.906	1.00	20.06	A	O
ATOM	2699	N	ASP	533	73.671	2.579	2.002	1.00	22.64	A	N
ATOM	2700	CA	ASP	533	73.376	1.142	2.046	1.00	23.74	A	C
ATOM	2701	CB	ASP	533	74.409	0.314	1.261	1.00	25.53	A	C
ATOM	2702	CG	ASP	533	74.768	0.918	-0.081	1.00	27.45	A	C
ATOM	2703	OD1	ASP	533	74.046	1.832	-0.545	1.00	28.77	A	O
ATOM	2704	OD2	ASP	533	75.786	0.466	-0.666	1.00	27.56	A	O
ATOM	2705	C	ASP	533	73.432	0.691	3.488	1.00	23.53	A	C
ATOM	2706	O	ASP	533	73.868	-0.423	3.781	1.00	22.80	A	O
ATOM	2707	N	SER	534	73.056	1.590	4.389	1.00	24.38	A	N
ATOM	2708	CA	SER	534	73.068	1.292	5.819	1.00	25.38	A	C
ATOM	2709	CB	SER	534	71.805	0.513	6.219	1.00	25.26	A	C
ATOM	2710	OG	SER	534	71.631	-0.640	5.418	1.00	28.29	A	O
ATOM	2711	C	SER	534	74.332	0.569	6.310	1.00	24.69	A	C
ATOM	2712	O	SER	534	74.257	-0.522	6.877	1.00	25.02	A	O
ATOM	2713	N	ILE	535	75.489	1.168	6.051	1.00	24.85	A	N
ATOM	2714	CA	ILE	535	76.753	0.603	6.495	1.00	25.62	A	C
ATOM	2715	CB	ILE	535	77.762	0.529	5.356	1.00	25.74	A	C
ATOM	2716	CG2	ILE	535	79.039	-0.143	5.810	1.00	24.70	A	C
ATOM	2717	CG1	ILE	535	77.154	-0.257	4.206	1.00	26.20	A	C
ATOM	2718	CD1	ILE	535	76.544	-1.556	4.630	1.00	27.63	A	C
ATOM	2719	C	ILE	535	77.287	1.455	7.634	1.00	26.89	A	C
ATOM	2720	O	ILE	535	77.888	2.518	7.432	1.00	26.08	A	O
ATOM	2721	N	ARG	536	77.005	0.985	8.838	1.00	29.17	A	N
ATOM	2722	CA	ARG	536	77.404	1.646	10.070	1.00	32.18	A	C
ATOM	2723	CB	ARG	536	77.277	0.659	11.237	1.00	34.47	A	C
ATOM	2724	CG	ARG	536	77.782	1.169	12.572	1.00	37.74	A	C
ATOM	2725	CD	ARG	536	77.544	0.134	13.649	1.00	41.93	A	C
ATOM	2726	NE	ARG	536	78.009	0.589	14.957	1.00	45.54	A	N
ATOM	2727	CZ	ARG	536	78.769	-0.130	15.783	1.00	47.38	A	C
ATOM	2728	NH1	ARG	536	79.163	-1.356	15.447	1.00	48.77	A	N
ATOM	2729	NH2	ARG	536	79.144	0.382	16.948	1.00	47.73	A	N
ATOM	2730	C	ARG	536	78.799	2.276	10.073	1.00	32.07	A	C
ATOM	2731	O	ARG	536	79.805	1.605	9.827	1.00	32.12	A	O
ATOM	2732	N	TYR	537	78.829	3.582	10.325	1.00	31.97	A	N
ATOM	2733	CA	TYR	537	80.060	4.336	10.421	1.00	32.19	A	C
ATOM	2734	CB	TYR	537	79.940	5.694	9.747	1.00	31.98	A	C
ATOM	2735	CG	TYR	537	81.211	6.507	9.861	1.00	31.89	A	C
ATOM	2736	CD1	TYR	537	81.393	7.427	10.894	1.00	31.68	A	C
ATOM	2737	CE1	TYR	537	82.595	8.154	11.016	1.00	32.08	A	C
ATOM	2738	CD2	TYR	537	82.253	6.329	8.947	1.00	32.27	A	C
ATOM	2739	CE2	TYR	537	83.454	7.046	9.054	1.00	32.22	A	C
ATOM	2740	CZ	TYR	537	83.623	7.955	10.088	1.00	31.67	A	C
ATOM	2741	OH	TYR	537	84.814	8.647	10.184	1.00	30.29	A	O
ATOM	2742	C	TYR	537	80.302	4.570	11.893	1.00	32.75	A	C
ATOM	2743	O	TYR	537	79.679	5.445	12.500	1.00	33.90	A	O
ATOM	2744	N	TYR	538	81.151	3.747	12.489	1.00	31.71	A	N
ATOM	2745	CA	TYR	538	81.459	3.922	13.894	1.00	30.11	A	C
ATOM	2746	CB	TYR	538	81.414	2.613	14.672	1.00	28.35	A	C
ATOM	2747	CG	TYR	538	81.828	2.849	16.097	1.00	26.55	A	C
ATOM	2748	CD1	TYR	538	80.884	3.175	17.060	1.00	26.06	A	C

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ATOM	2749	CE1	TYR	538	81.261	3.537	18.341	1.00	25.40	A	C
ATOM	2750	CD2	TYR	538	83.174	2.877	16.457	1.00	24.63	A	C
ATOM	2751	CE2	TYR	538	83.560	3.237	17.728	1.00	23.99	A	C
ATOM	2752	CZ	TYR	538	82.600	3.571	18.671	1.00	24.61	A	C
ATOM	2753	OH	TYR	538	82.966	3.956	19.945	1.00	24.69	A	O
ATOM	2754	C	TYR	538	82.851	4.489	13.995	1.00	30.71	A	C
ATOM	2755	O	TYR	538	83.772	3.994	13.340	1.00	31.20	A	O
ATOM	2756	N	ASN	539	83.025	5.484	14.854	1.00	31.08	A	N
ATOM	2757	CA	ASN	539	84.335	6.079	15.011	1.00	31.97	A	C
ATOM	2758	CB	ASN	539	84.715	6.875	13.771	1.00	33.39	A	C
ATOM	2759	CG	ASN	539	86.056	7.545	13.923	1.00	35.11	A	C
ATOM	2760	OD1	ASN	539	87.070	6.874	14.111	1.00	36.04	A	O
ATOM	2761	ND2	ASN	539	86.062	8.874	13.933	1.00	37.15	A	N
ATOM	2762	C	ASN	539	84.522	6.959	16.229	1.00	32.03	A	C
ATOM	2763	O	ASN	539	83.592	7.589	16.727	1.00	31.31	A	O
ATOM	2764	N	LYS	540	85.763	7.015	16.681	1.00	32.62	A	N
ATOM	2765	CA	LYS	540	86.124	7.825	17.822	1.00	33.97	A	C
ATOM	2766	CB	LYS	540	86.751	6.942	18.902	1.00	35.98	A	C
ATOM	2767	CG	LYS	540	85.895	5.790	19.418	1.00	37.23	A	C
ATOM	2768	CD	LYS	540	86.656	5.049	20.515	1.00	38.41	A	C
ATOM	2769	CE	LYS	540	85.818	3.966	21.180	1.00	39.85	A	C
ATOM	2770	NZ	LYS	540	86.457	3.414	22.431	1.00	41.34	A	N
ATOM	2771	C	LYS	540	87.164	8.831	17.330	1.00	34.08	A	C
ATOM	2772	O	LYS	540	88.364	8.522	17.296	1.00	34.53	A	O
ATOM	2773	N	VAL	541	86.730	10.027	16.940	1.00	33.00	A	N
ATOM	2774	CA	VAL	541	87.699	10.998	16.457	1.00	31.62	A	C
ATOM	2775	CB	VAL	541	87.474	11.348	14.999	1.00	30.64	A	C
ATOM	2776	CG1	VAL	541	86.094	11.818	14.818	1.00	29.54	A	C
ATOM	2777	CG2	VAL	541	88.455	12.427	14.552	1.00	29.77	A	C
ATOM	2778	C	VAL	541	87.845	12.277	17.257	1.00	32.16	A	C
ATOM	2779	O	VAL	541	86.872	12.971	17.541	1.00	32.11	A	O
ATOM	2780	N	PRO	542	89.095	12.603	17.619	1.00	33.15	A	N
ATOM	2781	CD	PRO	542	90.232	11.712	17.340	1.00	32.78	A	C
ATOM	2782	CA	PRO	542	89.536	13.774	18.383	1.00	33.84	A	C
ATOM	2783	CB	PRO	542	91.003	13.458	18.675	1.00	33.78	A	C
ATOM	2784	CG	PRO	542	91.100	11.959	18.512	1.00	34.25	A	C
ATOM	2785	C	PRO	542	89.464	14.974	17.464	1.00	34.46	A	C
ATOM	2786	O	PRO	542	90.067	14.961	16.385	1.00	34.89	A	O
ATOM	2787	N	VAL	543	88.755	16.013	17.887	1.00	35.32	A	N
ATOM	2788	CA	VAL	543	88.621	17.203	17.059	1.00	36.14	A	C
ATOM	2789	CB	VAL	543	87.175	17.380	16.600	1.00	36.23	A	C
ATOM	2790	CG1	VAL	543	86.737	16.160	15.784	1.00	35.55	A	C
ATOM	2791	CG2	VAL	543	86.273	17.589	17.809	1.00	35.99	A	C
ATOM	2792	C	VAL	543	89.066	18.472	17.757	1.00	36.37	A	C
ATOM	2793	O	VAL	543	89.334	18.468	18.950	1.00	36.49	A	O
ATOM	2794	N	GLU	544	89.134	19.558	16.996	1.00	37.27	A	N
ATOM	2795	CA	GLU	544	89.531	20.866	17.512	1.00	38.27	A	C
ATOM	2796	CB	GLU	544	89.520	21.895	16.382	1.00	40.48	A	C
ATOM	2797	CG	GLU	544	89.843	21.332	15.005	1.00	42.72	A	C
ATOM	2798	CD	GLU	544	91.292	21.522	14.614	1.00	44.43	A	C
ATOM	2799	OE1	GLU	544	91.697	22.693	14.413	1.00	44.52	A	O
ATOM	2800	OE2	GLU	544	92.016	20.502	14.499	1.00	45.55	A	O
ATOM	2801	C	GLU	544	88.524	21.304	18.578	1.00	37.63	A	C
ATOM	2802	O	GLU	544	87.312	21.246	18.354	1.00	37.20	A	O
ATOM	2803	N	LYS	545	89.036	21.770	19.715	1.00	36.94	A	N
ATOM	2804	CA	LYS	545	88.204	22.209	20.835	1.00	36.32	A	C
ATOM	2805	CB	LYS	545	89.038	23.046	21.818	1.00	37.34	A	C
ATOM	2806	CG	LYS	545	88.214	23.957	22.726	1.00	39.00	A	C
ATOM	2807	CD	LYS	545	88.927	24.311	24.033	1.00	41.21	A	C
ATOM	2808	CE	LYS	545	90.270	25.002	23.807	1.00	42.81	A	C
ATOM	2809	NZ	LYS	545	90.969	25.365	25.085	1.00	45.34	A	N
ATOM	2810	C	LYS	545	86.960	22.974	20.393	1.00	35.02	A	C

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ATOM	2811	O	LYS	545	85.832	22.645	20.795	1.00	34.39	A	O
ATOM	2812	N	ALA	546	87.176	23.958	19.522	1.00	34.04	A	N
ATOM	2813	CA	ALA	546	86.096	24.797	19.001	1.00	32.68	A	C
ATOM	2814	CB	ALA	546	86.650	25.814	17.999	1.00	33.28	A	C
ATOM	2815	C	ALA	546	85.002	23.948	18.360	1.00	30.69	A	C
ATOM	2816	O	ALA	546	83.813	24.150	18.619	1.00	30.27	A	O
ATOM	2817	N	VAL	547	85.417	22.991	17.535	1.00	28.17	A	N
ATOM	2818	CA	VAL	547	84.474	22.096	16.891	1.00	25.84	A	C
ATOM	2819	CB	VAL	547	85.197	20.990	16.095	1.00	24.86	A	C
ATOM	2820	CG1	VAL	547	84.189	20.090	15.421	1.00	23.20	A	C
ATOM	2821	CG2	VAL	547	86.142	21.596	15.075	1.00	24.08	A	C
ATOM	2822	C	VAL	547	83.705	21.441	18.030	1.00	25.43	A	C
ATOM	2823	O	VAL	547	82.496	21.625	18.160	1.00	25.23	A	O
ATOM	2824	N	PHE	548	84.457	20.792	18.918	1.00	24.60	A	N
ATOM	2825	CA	PHE	548	83.894	20.094	20.061	1.00	24.07	A	C
ATOM	2826	CB	PHE	548	84.998	19.711	21.064	1.00	22.56	A	C
ATOM	2827	CG	PHE	548	84.542	18.740	22.132	1.00	21.75	A	C
ATOM	2828	CD1	PHE	548	84.690	17.373	21.953	1.00	21.28	A	C
ATOM	2829	CD2	PHE	548	83.925	19.195	23.297	1.00	21.80	A	C
ATOM	2830	CE1	PHE	548	84.230	16.463	22.908	1.00	20.97	A	C
ATOM	2831	CE2	PHE	548	83.460	18.299	24.260	1.00	21.29	A	C
ATOM	2832	CZ	PHE	548	83.614	16.924	24.062	1.00	20.99	A	C
ATOM	2833	C	PHE	548	82.858	20.959	20.743	1.00	24.72	A	C
ATOM	2834	O	PHE	548	81.674	20.615	20.800	1.00	23.89	A	O
ATOM	2835	N	LYS	549	83.308	22.110	21.214	1.00	26.35	A	N
ATOM	2836	CA	LYS	549	82.422	23.020	21.906	1.00	29.11	A	C
ATOM	2837	CB	LYS	549	83.209	24.204	22.460	1.00	31.49	A	C
ATOM	2838	CG	LYS	549	84.142	23.832	23.604	1.00	33.72	A	C
ATOM	2839	CD	LYS	549	84.714	25.078	24.273	1.00	36.03	A	C
ATOM	2840	CE	LYS	549	85.421	24.748	25.591	1.00	38.01	A	C
ATOM	2841	NZ	LYS	549	86.129	25.930	26.211	1.00	39.20	A	N
ATOM	2842	C	LYS	549	81.273	23.485	21.022	1.00	29.28	A	C
ATOM	2843	O	LYS	549	80.149	23.665	21.501	1.00	29.93	A	O
ATOM	2844	N	ASN	550	81.550	23.665	19.733	1.00	29.28	A	N
ATOM	2845	CA	ASN	550	80.514	24.088	18.806	1.00	29.46	A	C
ATOM	2846	CB	ASN	550	81.108	24.397	17.424	1.00	30.14	A	C
ATOM	2847	CG	ASN	550	81.532	25.869	17.273	1.00	31.47	A	C
ATOM	2848	OD1	ASN	550	81.095	26.735	18.036	1.00	31.61	A	O
ATOM	2849	ND2	ASN	550	82.373	26.153	16.273	1.00	31.76	A	N
ATOM	2850	C	ASN	550	79.511	22.951	18.724	1.00	29.74	A	C
ATOM	2851	O	ASN	550	78.305	23.156	18.883	1.00	28.27	A	O
ATOM	2852	N	LEU	551	80.035	21.741	18.542	1.00	31.08	A	N
ATOM	2853	CA	LEU	551	79.217	20.532	18.452	1.00	32.66	A	C
ATOM	2854	CB	LEU	551	80.106	19.301	18.405	1.00	31.60	A	C
ATOM	2855	CG	LEU	551	80.338	18.833	16.980	1.00	31.03	A	C
ATOM	2856	CD1	LEU	551	81.186	17.583	17.011	1.00	30.69	A	C
ATOM	2857	CD2	LEU	551	78.985	18.559	16.312	1.00	30.44	A	C
ATOM	2858	C	LEU	551	78.335	20.461	19.669	1.00	34.14	A	C
ATOM	2859	O	LEU	551	77.109	20.331	19.583	1.00	34.62	A	O
ATOM	2860	N	GLN	552	79.006	20.566	20.805	1.00	35.54	A	N
ATOM	2861	CA	GLN	552	78.390	20.575	22.109	1.00	36.80	A	C
ATOM	2862	CB	GLN	552	79.440	21.091	23.082	1.00	39.67	A	C
ATOM	2863	CG	GLN	552	79.111	21.035	24.550	1.00	43.58	A	C
ATOM	2864	CD	GLN	552	80.317	21.436	25.387	1.00	45.96	A	C
ATOM	2865	OE1	GLN	552	81.356	21.835	24.840	1.00	47.09	A	O
ATOM	2866	NE2	GLN	552	80.195	21.331	26.713	1.00	46.94	A	N
ATOM	2867	C	GLN	552	77.214	21.544	22.027	1.00	35.76	A	C
ATOM	2868	O	GLN	552	76.100	21.228	22.440	1.00	36.25	A	O
ATOM	2869	N	LEU	553	77.452	22.672	21.370	1.00	34.73	A	N
ATOM	2870	CA	LEU	553	76.436	23.691	21.216	1.00	34.40	A	C
ATOM	2871	CB	LEU	553	77.067	24.983	20.730	1.00	35.26	A	C
ATOM	2872	CG	LEU	553	76.228	26.226	21.013	1.00	35.59	A	C

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ATOM	2873	CD1	LEU	553	75.835	26.282	22.496	1.00	36.14	A	C
ATOM	2874	CD2	LEU	553	77.033	27.453	20.631	1.00	35.75	A	C
ATOM	2875	C	LEU	553	75.314	23.287	20.282	1.00	33.68	A	C
ATOM	2876	O	LEU	553	74.144	23.513	20.586	1.00	33.49	A	O
ATOM	2877	N	PHE	554	75.666	22.690	19.148	1.00	33.32	A	N
ATOM	2878	CA	PHE	554	74.662	22.250	18.175	1.00	32.73	A	C
ATOM	2879	CB	PHE	554	75.321	21.531	16.990	1.00	31.42	A	C
ATOM	2880	CG	PHE	554	76.295	22.379	16.228	1.00	30.26	A	C
ATOM	2881	CD1	PHE	554	75.948	23.658	15.806	1.00	30.19	A	C
ATOM	2882	CD2	PHE	554	77.569	21.907	15.951	1.00	29.48	A	C
ATOM	2883	CE1	PHE	554	76.864	24.458	15.124	1.00	29.76	A	C
ATOM	2884	CE2	PHE	554	78.491	22.695	15.272	1.00	28.76	A	C
ATOM	2885	CZ	PHE	554	78.140	23.972	14.857	1.00	28.95	A	C
ATOM	2886	C	PHE	554	73.639	21.308	18.796	1.00	32.59	A	C
ATOM	2887	O	PHE	554	72.494	21.245	18.360	1.00	32.15	A	O
ATOM	2888	N	MET	555	74.063	20.598	19.834	1.00	33.14	A	N
ATOM	2889	CA	MET	555	73.218	19.627	20.517	1.00	33.10	A	C
ATOM	2890	CB	MET	555	74.105	18.584	21.185	1.00	33.82	A	C
ATOM	2891	CG	MET	555	75.075	17.947	20.207	1.00	34.46	A	C
ATOM	2892	SD	MET	555	76.160	16.728	20.947	1.00	34.78	A	S
ATOM	2893	CE	MET	555	76.325	17.429	22.631	1.00	35.43	A	C
ATOM	2894	C	MET	555	72.259	20.232	21.527	1.00	32.46	A	C
ATOM	2895	O	MET	555	71.128	19.769	21.683	1.00	31.76	A	O
ATOM	2896	N	GLU	556	72.739	21.249	22.226	1.00	32.41	A	N
ATOM	2897	CA	GLU	556	71.968	21.964	23.231	1.00	32.83	A	C
ATOM	2898	CB	GLU	556	72.520	23.378	23.319	1.00	34.30	A	C
ATOM	2899	CG	GLU	556	71.748	24.297	24.222	1.00	36.37	A	C
ATOM	2900	CD	GLU	556	72.458	24.538	25.525	1.00	37.46	A	C
ATOM	2901	OE1	GLU	556	73.710	24.467	25.525	1.00	38.43	A	O
ATOM	2902	OE2	GLU	556	71.770	24.801	26.542	1.00	38.17	A	O
ATOM	2903	C	GLU	556	70.455	22.030	22.969	1.00	32.33	A	C
ATOM	2904	O	GLU	556	70.013	22.493	21.919	1.00	32.20	A	O
ATOM	2905	N	ASN	557	69.676	21.514	23.911	1.00	32.51	A	N
ATOM	2906	CA	ASN	557	68.212	21.546	23.836	1.00	33.51	A	C
ATOM	2907	CB	ASN	557	67.716	22.990	23.668	1.00	34.50	A	C
ATOM	2908	CG	ASN	557	68.429	23.974	24.593	1.00	35.90	A	C
ATOM	2909	OD1	ASN	557	69.076	23.576	25.565	1.00	36.37	A	O
ATOM	2910	ND2	ASN	557	68.337	25.266	24.274	1.00	35.98	A	N
ATOM	2911	C	ASN	557	67.510	20.663	22.804	1.00	32.93	A	C
ATOM	2912	O	ASN	557	66.277	20.620	22.778	1.00	33.08	A	O
ATOM	2913	N	LYS	558	68.268	19.942	21.980	1.00	32.43	A	N
ATOM	2914	CA	LYS	558	67.673	19.073	20.950	1.00	32.06	A	C
ATOM	2915	CB	LYS	558	68.595	18.982	19.735	1.00	30.23	A	C
ATOM	2916	CG	LYS	558	68.823	20.279	18.999	1.00	27.39	A	C
ATOM	2917	CD	LYS	558	69.666	20.029	17.758	1.00	24.11	A	C
ATOM	2918	CE	LYS	558	69.912	21.308	17.008	1.00	22.05	A	C
ATOM	2919	NZ	LYS	558	70.708	21.041	15.801	1.00	21.24	A	N
ATOM	2920	C	LYS	558	67.314	17.638	21.359	1.00	32.83	A	C
ATOM	2921	O	LYS	558	67.926	17.053	22.254	1.00	33.16	A	O
ATOM	2922	N	GLN	559	66.336	17.069	20.661	1.00	33.12	A	N
ATOM	2923	CA	GLN	559	65.905	15.689	20.879	1.00	33.49	A	C
ATOM	2924	CB	GLN	559	64.456	15.518	20.452	1.00	34.06	A	C
ATOM	2925	CG	GLN	559	63.494	16.042	21.467	1.00	35.08	A	C
ATOM	2926	CD	GLN	559	63.722	15.392	22.815	1.00	35.97	A	C
ATOM	2927	OE1	GLN	559	63.671	14.161	22.949	1.00	36.46	A	O
ATOM	2928	NE2	GLN	559	64.010	16.210	23.819	1.00	36.91	A	N
ATOM	2929	C	GLN	559	66.789	14.772	20.038	1.00	33.58	A	C
ATOM	2930	O	GLN	559	67.284	15.178	18.985	1.00	34.43	A	O
ATOM	2931	N	PRO	560	66.999	13.525	20.482	1.00	32.58	A	N
ATOM	2932	CD	PRO	560	66.495	12.899	21.716	1.00	32.21	A	C
ATOM	2933	CA	PRO	560	67.839	12.592	19.726	1.00	32.59	A	C
ATOM	2934	CB	PRO	560	67.505	11.258	20.369	1.00	32.56	A	C

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ATOM	2935	CG	PRO	560	67.337	11.645	21.809	1.00	32.36	A	C
ATOM	2936	C	PRO	560	67.514	12.599	18.242	1.00	33.39	A	C
ATOM	2937	O	PRO	560	68.408	12.679	17.400	1.00	32.36	A	O
ATOM	2938	N	GLU	561	66.214	12.639	17.954	1.00	34.58	A	N
ATOM	2939	CA	GLU	561	65.691	12.638	16.592	1.00	35.51	A	C
ATOM	2940	CB	GLU	561	64.182	12.372	16.577	1.00	36.53	A	C
ATOM	2941	CG	GLU	561	63.681	11.469	17.683	1.00	38.22	A	C
ATOM	2942	CD	GLU	561	63.505	12.216	18.992	1.00	39.89	A	C
ATOM	2943	OE1	GLU	561	64.370	12.060	19.881	1.00	40.33	A	O
ATOM	2944	OE2	GLU	561	62.502	12.962	19.125	1.00	39.65	A	O
ATOM	2945	C	GLU	561	65.946	13.955	15.890	1.00	35.27	A	C
ATOM	2946	O	GLU	561	65.788	14.059	14.669	1.00	36.69	A	O
ATOM	2947	N	ASP	562	66.292	14.977	16.658	1.00	33.60	A	N
ATOM	2948	CA	ASP	562	66.557	16.267	16.055	1.00	32.64	A	C
ATOM	2949	CB	ASP	562	66.630	17.353	17.119	1.00	32.36	A	C
ATOM	2950	CG	ASP	562	65.302	17.593	17.789	1.00	31.93	A	C
ATOM	2951	OD1	ASP	562	65.219	18.533	18.601	1.00	33.03	A	O
ATOM	2952	OD2	ASP	562	64.338	16.848	17.513	1.00	32.67	A	O
ATOM	2953	C	ASP	562	67.833	16.238	15.230	1.00	32.07	A	C
ATOM	2954	O	ASP	562	68.851	15.685	15.658	1.00	31.75	A	O
ATOM	2955	N	ASP	563	67.742	16.779	14.017	1.00	31.11	A	N
ATOM	2956	CA	ASP	563	68.879	16.840	13.118	1.00	30.16	A	C
ATOM	2957	CB	ASP	563	68.509	17.565	11.830	1.00	30.66	A	C
ATOM	2958	CG	ASP	563	67.800	16.671	10.847	1.00	31.44	A	C
ATOM	2959	OD1	ASP	563	67.937	15.432	10.954	1.00	32.25	A	O
ATOM	2960	OD2	ASP	563	67.114	17.209	9.955	1.00	32.84	A	O
ATOM	2961	C	ASP	563	70.012	17.576	13.786	1.00	29.42	A	C
ATOM	2962	O	ASP	563	69.814	18.645	14.366	1.00	29.51	A	O
ATOM	2963	N	LEU	564	71.193	16.977	13.734	1.00	28.34	A	N
ATOM	2964	CA	LEU	564	72.356	17.586	14.327	1.00	27.29	A	C
ATOM	2965	CB	LEU	564	73.599	16.758	14.074	1.00	27.73	A	C
ATOM	2966	CG	LEU	564	74.804	17.538	14.594	1.00	28.96	A	C
ATOM	2967	CD1	LEU	564	74.790	17.530	16.116	1.00	29.75	A	C
ATOM	2968	CD2	LEU	564	76.095	16.960	14.063	1.00	30.34	A	C
ATOM	2969	C	LEU	564	72.554	18.957	13.723	1.00	27.74	A	C
ATOM	2970	O	LEU	564	72.431	19.958	14.416	1.00	27.87	A	O
ATOM	2971	N	PHE	565	72.866	19.007	12.431	1.00	28.63	A	N
ATOM	2972	CA	PHE	565	73.074	20.297	11.781	1.00	29.30	A	C
ATOM	2973	CB	PHE	565	74.037	20.185	10.609	1.00	28.44	A	C
ATOM	2974	CG	PHE	565	75.395	19.704	10.986	1.00	28.11	A	C
ATOM	2975	CD1	PHE	565	76.139	20.372	11.947	1.00	28.31	A	C
ATOM	2976	CD2	PHE	565	75.946	18.586	10.360	1.00	27.78	A	C
ATOM	2977	CE1	PHE	565	77.424	19.932	12.283	1.00	28.51	A	C
ATOM	2978	CE2	PHE	565	77.221	18.136	10.683	1.00	27.91	A	C
ATOM	2979	CZ	PHE	565	77.966	18.813	11.650	1.00	28.45	A	C
ATOM	2980	C	PHE	565	71.769	20.895	11.291	1.00	30.61	A	C
ATOM	2981	O	PHE	565	71.539	20.993	10.076	1.00	31.15	A	O
ATOM	2982	N	ASP	566	70.904	21.278	12.232	1.00	31.34	A	N
ATOM	2983	CA	ASP	566	69.626	21.894	11.886	1.00	31.97	A	C
ATOM	2984	CB	ASP	566	68.869	22.273	13.154	1.00	31.61	A	C
ATOM	2985	CG	ASP	566	69.503	23.453	13.876	1.00	31.93	A	C
ATOM	2986	OD1	ASP	566	70.723	23.400	14.167	1.00	32.02	A	O
ATOM	2987	OD2	ASP	566	68.787	24.445	14.127	1.00	31.97	A	O
ATOM	2988	C	ASP	566	70.033	23.159	11.146	1.00	33.09	A	C
ATOM	2989	O	ASP	566	71.203	23.524	11.167	1.00	33.74	A	O
ATOM	2990	N	ARG	567	69.092	23.851	10.521	1.00	33.64	A	N
ATOM	2991	CA	ARG	567	69.453	25.067	9.791	1.00	33.94	A	C
ATOM	2992	CB	ARG	567	69.929	26.160	10.754	1.00	34.41	A	C
ATOM	2993	CG	ARG	567	69.004	26.485	11.887	1.00	36.20	A	C
ATOM	2994	CD	ARG	567	69.694	27.495	12.776	1.00	38.77	A	C
ATOM	2995	NE	ARG	567	68.908	27.865	13.946	1.00	42.67	A	N
ATOM	2996	CZ	ARG	567	69.122	28.956	14.676	1.00	45.32	A	C

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ATOM	2997	NH1	ARG	567	70.098	29.792	14.353	1.00	46.52	A	N
ATOM	2998	NH2	ARG	567	68.370	29.204	15.742	1.00	47.72	A	N
ATOM	2999	C	ARG	567	70.617	24.732	8.856	1.00	33.29	A	C
ATOM	3000	O	ARG	567	71.648	25.414	8.873	1.00	32.98	A	O
ATOM	3001	N	LEU	568	70.482	23.640	8.107	1.00	32.27	A	N
ATOM	3002	CA	LEU	568	71.537	23.215	7.194	1.00	30.30	A	C
ATOM	3003	CB	LEU	568	72.806	22.909	7.980	1.00	30.02	A	C
ATOM	3004	CG	LEU	568	74.149	23.027	7.256	1.00	31.42	A	C
ATOM	3005	CD1	LEU	568	75.249	22.597	8.234	1.00	31.95	A	C
ATOM	3006	CD2	LEU	568	74.220	22.213	5.957	1.00	30.38	A	C
ATOM	3007	C	LEU	568	71.176	21.970	6.388	1.00	29.43	A	C
ATOM	3008	O	LEU	568	70.834	20.909	6.957	1.00	30.45	A	O
ATOM	3009	N	ASN	569	71.310	22.090	5.068	1.00	27.34	A	N
ATOM	3010	CA	ASN	569	71.055	20.984	4.159	1.00	25.73	A	C
ATOM	3011	CB	ASN	569	69.740	21.182	3.421	1.00	26.25	A	C
ATOM	3012	CG	ASN	569	69.815	22.281	2.401	1.00	27.29	A	C
ATOM	3013	OD1	ASN	569	70.628	22.234	1.471	1.00	27.03	A	O
ATOM	3014	ND2	ASN	569	68.971	23.293	2.568	1.00	28.64	A	N
ATOM	3015	C	ASN	569	72.206	20.940	3.167	1.00	24.44	A	C
ATOM	3016	O	ASN	569	72.981	21.894	3.052	1.00	24.16	A	O
ATOM	3017	N	THR	570	72.285	19.855	2.416	1.00	23.41	A	N
ATOM	3018	CA	THR	570	73.347	19.704	1.436	1.00	22.84	A	C
ATOM	3019	CB	THR	570	73.179	18.421	0.634	1.00	24.09	A	C
ATOM	3020	OG1	THR	570	71.814	17.970	0.720	1.00	24.54	A	O
ATOM	3021	CG2	THR	570	74.141	17.354	1.152	1.00	24.37	A	C
ATOM	3022	C	THR	570	73.397	20.858	0.463	1.00	21.45	A	C
ATOM	3023	O	THR	570	74.446	21.463	0.261	1.00	21.47	A	O
ATOM	3024	N	GLY	571	72.248	21.171	-0.119	1.00	20.28	A	N
ATOM	3025	CA	GLY	571	72.179	22.260	-1.076	1.00	19.63	A	C
ATOM	3026	C	GLY	571	72.956	23.482	-0.632	1.00	19.13	A	C
ATOM	3027	O	GLY	571	73.788	24.015	-1.370	1.00	18.15	A	O
ATOM	3028	N	ILE	572	72.730	23.874	0.614	1.00	18.71	A	N
ATOM	3029	CA	ILE	572	73.401	25.029	1.187	1.00	17.75	A	C
ATOM	3030	CB	ILE	572	72.954	25.241	2.644	1.00	14.98	A	C
ATOM	3031	CG2	ILE	572	73.577	26.503	3.195	1.00	15.56	A	C
ATOM	3032	CG1	ILE	572	71.426	25.311	2.716	1.00	13.55	A	C
ATOM	3033	CD1	ILE	572	70.862	25.650	4.083	1.00	12.90	A	C
ATOM	3034	C	ILE	572	74.916	24.819	1.161	1.00	19.01	A	C
ATOM	3035	O	ILE	572	75.679	25.617	0.577	1.00	19.43	A	O
ATOM	3036	N	LEU	573	75.327	23.724	1.790	1.00	20.09	A	N
ATOM	3037	CA	LEU	573	76.726	23.355	1.884	1.00	21.77	A	C
ATOM	3038	CB	LEU	573	76.843	21.899	2.334	1.00	21.62	A	C
ATOM	3039	CG	LEU	573	78.171	21.204	2.034	1.00	20.82	A	C
ATOM	3040	CD1	LEU	573	79.299	21.976	2.673	1.00	20.50	A	C
ATOM	3041	CD2	LEU	573	78.143	19.774	2.539	1.00	20.13	A	C
ATOM	3042	C	LEU	573	77.443	23.543	0.556	1.00	23.65	A	C
ATOM	3043	O	LEU	573	78.542	24.100	0.502	1.00	23.99	A	O
ATOM	3044	N	ASN	574	76.812	23.093	-0.520	1.00	25.09	A	N
ATOM	3045	CA	ASN	574	77.438	23.218	-1.816	1.00	26.75	A	C
ATOM	3046	CB	ASN	574	76.825	22.242	-2.798	1.00	26.58	A	C
ATOM	3047	CG	ASN	574	77.021	20.823	-2.370	1.00	26.65	A	C
ATOM	3048	OD1	ASN	574	78.131	20.278	-2.455	1.00	26.53	A	O
ATOM	3049	ND2	ASN	574	75.951	20.212	-1.866	1.00	27.24	A	N
ATOM	3050	C	ASN	574	77.389	24.627	-2.354	1.00	28.42	A	C
ATOM	3051	O	ASN	574	78.377	25.092	-2.936	1.00	28.73	A	O
ATOM	3052	N	LYS	575	76.266	25.315	-2.133	1.00	29.69	A	N
ATOM	3053	CA	LYS	575	76.122	26.677	-2.622	1.00	30.47	A	C
ATOM	3054	CB	LYS	575	74.820	27.317	-2.150	1.00	32.52	A	C
ATOM	3055	CG	LYS	575	74.608	28.711	-2.729	1.00	36.24	A	C
ATOM	3056	CD	LYS	575	75.003	28.743	-4.216	1.00	38.45	A	C
ATOM	3057	CE	LYS	575	75.551	30.124	-4.627	1.00	39.80	A	C
ATOM	3058	NZ	LYS	575	76.267	30.120	-5.950	1.00	38.99	A	N



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ATOM	3059	C	LYS	575	77.318	27.460	-2.130	1.00	30.12	A	C
ATOM	3060	O	LYS	575	77.971	28.174	-2.904	1.00	31.47	A	O
ATOM	3061	N	HIS	576	77.671	27.235	-0.873	1.00	28.19	A	N
ATOM	3062	CA	HIS	576	78.827	27.902	-0.307	1.00	26.38	A	C
ATOM	3063	CB	HIS	576	79.002	27.447	1.130	1.00	27.78	A	C
ATOM	3064	CG	HIS	576	80.145	28.099	1.833	1.00	28.64	A	C
ATOM	3065	CD2	HIS	576	80.561	29.386	1.853	1.00	29.60	A	C
ATOM	3066	ND1	HIS	576	81.003	27.404	2.658	1.00	29.80	A	N
ATOM	3067	CE1	HIS	576	81.897	28.237	3.160	1.00	30.76	A	C
ATOM	3068	NE2	HIS	576	81.651	29.446	2.687	1.00	30.63	A	N
ATOM	3069	C	HIS	576	80.074	27.545	-1.119	1.00	24.59	A	C
ATOM	3070	O	HIS	576	80.721	28.403	-1.725	1.00	22.74	A	O
ATOM	3071	N	LEU	577	80.357	26.250	-1.153	1.00	23.57	A	N
ATOM	3072	CA	LEU	577	81.491	25.692	-1.870	1.00	23.78	A	C
ATOM	3073	CB	LEU	577	81.314	24.187	-2.004	1.00	23.82	A	C
ATOM	3074	CG	LEU	577	81.335	23.357	-0.728	1.00	23.84	A	C
ATOM	3075	CD1	LEU	577	80.685	22.024	-0.988	1.00	23.63	A	C
ATOM	3076	CD2	LEU	577	82.762	23.175	-0.261	1.00	23.50	A	C
ATOM	3077	C	LEU	577	81.623	26.270	-3.256	1.00	23.75	A	C
ATOM	3078	O	LEU	577	82.716	26.600	-3.702	1.00	22.64	A	O
ATOM	3079	N	GLN	578	80.490	26.390	-3.928	1.00	25.33	A	N
ATOM	3080	CA	GLN	578	80.465	26.908	-5.276	1.00	28.38	A	C
ATOM	3081	CB	GLN	578	79.044	26.960	-5.810	1.00	28.73	A	C
ATOM	3082	CG	GLN	578	79.011	27.268	-7.300	1.00	29.04	A	C
ATOM	3083	CD	GLN	578	80.022	26.437	-8.084	1.00	29.39	A	C
ATOM	3084	OE1	GLN	578	80.179	25.227	-7.851	1.00	30.17	A	O
ATOM	3085	NE2	GLN	578	80.727	27.087	-8.999	1.00	29.46	A	N
ATOM	3086	C	GLN	578	81.086	28.282	-5.400	1.00	30.20	A	C
ATOM	3087	O	GLN	578	81.847	28.561	-6.336	1.00	30.20	A	O
ATOM	3088	N	ASP	579	80.746	29.147	-4.458	1.00	32.09	A	N
ATOM	3089	CA	ASP	579	81.277	30.497	-4.465	1.00	33.64	A	C
ATOM	3090	CB	ASP	579	80.474	31.345	-3.482	1.00	35.33	A	C
ATOM	3091	CG	ASP	579	78.981	31.348	-3.819	1.00	36.99	A	C
ATOM	3092	OD1	ASP	579	78.656	31.149	-5.021	1.00	37.48	A	O
ATOM	3093	OD2	ASP	579	78.142	31.533	-2.898	1.00	36.81	A	O
ATOM	3094	C	ASP	579	82.783	30.507	-4.169	1.00	33.58	A	C
ATOM	3095	O	ASP	579	83.514	31.381	-4.637	1.00	33.44	A	O
ATOM	3096	N	LEU	580	83.246	29.473	-3.471	1.00	33.32	A	N
ATOM	3097	CA	LEU	580	84.654	29.335	-3.131	1.00	33.61	A	C
ATOM	3098	CB	LEU	580	84.791	28.445	-1.912	1.00	34.16	A	C
ATOM	3099	CG	LEU	580	84.010	29.136	-0.798	1.00	35.08	A	C
ATOM	3100	CD1	LEU	580	83.503	28.143	0.229	1.00	35.46	A	C
ATOM	3101	CD2	LEU	580	84.885	30.230	-0.184	1.00	35.91	A	C
ATOM	3102	C	LEU	580	85.435	28.752	-4.291	1.00	34.09	A	C
ATOM	3103	O	LEU	580	86.638	28.997	-4.427	1.00	34.51	A	O
ATOM	3104	N	MET	581	84.741	27.976	-5.122	1.00	33.95	A	N
ATOM	3105	CA	MET	581	85.340	27.342	-6.293	1.00	33.57	A	C
ATOM	3106	CB	MET	581	86.210	26.157	-5.884	1.00	33.81	A	C
ATOM	3107	CG	MET	581	86.773	25.385	-7.045	1.00	36.30	A	C
ATOM	3108	SD	MET	581	88.364	24.629	-6.605	1.00	42.72	A	S
ATOM	3109	CE	MET	581	88.160	22.960	-7.272	1.00	40.02	A	C
ATOM	3110	C	MET	581	84.246	26.877	-7.241	1.00	33.33	A	C
ATOM	3111	O	MET	581	83.182	26.428	-6.802	1.00	33.27	A	O
ATOM	3112	N	ALA	582	84.507	27.005	-8.542	1.00	33.19	A	N
ATOM	3113	CA	ALA	582	83.543	26.598	-9.563	1.00	32.10	A	C
ATOM	3114	CB	ALA	582	83.971	27.088	-10.958	1.00	32.49	A	C
ATOM	3115	C	ALA	582	83.406	25.086	-9.542	1.00	30.88	A	C
ATOM	3116	O	ALA	582	84.396	24.358	-9.628	1.00	31.10	A	O
ATOM	3117	N	GLY	583	82.176	24.627	-9.359	1.00	29.47	A	N
ATOM	3118	CA	GLY	583	81.919	23.204	-9.315	1.00	28.63	A	C
ATOM	3119	C	GLY	583	82.341	22.575	-8.009	1.00	27.59	A	C
ATOM	3120	O	GLY	583	82.476	21.360	-7.903	1.00	27.32	A	O

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ATOM	3121	N	LEU	584	82.577	23.396	-7.003	1.00	27.30	A	N
ATOM	3122	CA	LEU	584	82.968	22.836	-5.731	1.00	27.34	A	C
ATOM	3123	CB	LEU	584	83.566	23.905	-4.821	1.00	28.16	A	C
ATOM	3124	CG	LEU	584	84.274	23.308	-3.599	1.00	28.82	A	C
ATOM	3125	CD1	LEU	584	85.346	22.302	-4.047	1.00	28.07	A	C
ATOM	3126	CD2	LEU	584	84.884	24.416	-2.738	1.00	29.62	A	C
ATOM	3127	C	LEU	584	81.732	22.221	-5.091	1.00	26.82	A	C
ATOM	3128	O	LEU	584	80.644	22.809	-5.137	1.00	26.95	A	O
ATOM	3129	N	THR	585	81.900	21.010	-4.563	1.00	25.97	A	N
ATOM	3130	CA	THR	585	80.834	20.265	-3.902	1.00	24.38	A	C
ATOM	3131	CB	THR	585	79.945	19.529	-4.895	1.00	23.82	A	C
ATOM	3132	OG1	THR	585	80.748	18.643	-5.692	1.00	23.50	A	O
ATOM	3133	CG2	THR	585	79.202	20.509	-5.781	1.00	23.93	A	C
ATOM	3134	C	THR	585	81.427	19.196	-3.002	1.00	24.99	A	C
ATOM	3135	O	THR	585	82.531	18.687	-3.246	1.00	24.63	A	O
ATOM	3136	N	ALA	586	80.635	18.778	-2.025	1.00	24.79	A	N
ATOM	3137	CA	ALA	586	81.058	17.765	-1.067	1.00	24.58	A	C
ATOM	3138	CB	ALA	586	79.857	17.291	-0.269	1.00	25.14	A	C
ATOM	3139	C	ALA	586	81.820	16.567	-1.668	1.00	24.56	A	C
ATOM	3140	O	ALA	586	82.883	16.192	-1.175	1.00	25.43	A	O
ATOM	3141	N	LYS	587	81.296	15.993	-2.747	1.00	23.75	A	N
ATOM	3142	CA	LYS	587	81.928	14.849	-3.385	1.00	22.61	A	C
ATOM	3143	CB	LYS	587	81.258	14.561	-4.738	1.00	22.34	A	C
ATOM	3144	CG	LYS	587	82.119	13.791	-5.767	1.00	23.57	A	C
ATOM	3145	CD	LYS	587	81.233	12.960	-6.725	1.00	26.46	A	C
ATOM	3146	CE	LYS	587	81.826	12.768	-8.140	1.00	28.41	A	C
ATOM	3147	NZ	LYS	587	83.125	12.002	-8.238	1.00	31.27	A	N
ATOM	3148	C	LYS	587	83.412	15.074	-3.577	1.00	21.93	A	C
ATOM	3149	O	LYS	587	84.245	14.342	-3.035	1.00	21.12	A	O
ATOM	3150	N	VAL	588	83.715	16.164	-4.266	1.00	22.23	A	N
ATOM	3151	CA	VAL	588	85.076	16.541	-4.602	1.00	23.14	A	C
ATOM	3152	CB	VAL	588	85.180	18.058	-4.835	1.00	24.17	A	C
ATOM	3153	CG1	VAL	588	86.480	18.383	-5.572	1.00	23.57	A	C
ATOM	3154	CG2	VAL	588	83.971	18.563	-5.610	1.00	23.75	A	C
ATOM	3155	C	VAL	588	86.120	16.138	-3.566	1.00	22.64	A	C
ATOM	3156	O	VAL	588	87.133	15.515	-3.898	1.00	22.71	A	O
ATOM	3157	N	PHE	589	85.842	16.454	-2.306	1.00	21.84	A	N
ATOM	3158	CA	PHE	589	86.767	16.152	-1.230	1.00	21.47	A	C
ATOM	3159	CB	PHE	589	86.250	16.707	0.083	1.00	20.34	A	C
ATOM	3160	CG	PHE	589	86.374	18.197	0.187	1.00	19.05	A	C
ATOM	3161	CD1	PHE	589	85.244	19.005	0.206	1.00	18.03	A	C
ATOM	3162	CD2	PHE	589	87.631	18.798	0.263	1.00	18.38	A	C
ATOM	3163	CE1	PHE	589	85.362	20.392	0.300	1.00	17.59	A	C
ATOM	3164	CE2	PHE	589	87.759	20.179	0.357	1.00	17.52	A	C
ATOM	3165	CZ	PHE	589	86.619	20.977	0.375	1.00	17.79	A	C
ATOM	3166	C	PHE	589	87.180	14.707	-1.072	1.00	22.12	A	C
ATOM	3167	O	PHE	589	88.378	14.422	-1.057	1.00	21.44	A	O
ATOM	3168	N	ARG	590	86.213	13.796	-0.967	1.00	23.42	A	N
ATOM	3169	CA	ARG	590	86.549	12.379	-0.810	1.00	25.79	A	C
ATOM	3170	CB	ARG	590	85.310	11.474	-0.909	1.00	26.57	A	C
ATOM	3171	CG	ARG	590	84.267	11.692	0.208	1.00	27.57	A	C
ATOM	3172	CD	ARG	590	83.241	10.548	0.296	1.00	28.09	A	C
ATOM	3173	NE	ARG	590	83.771	9.362	0.976	1.00	28.82	A	N
ATOM	3174	CZ	ARG	590	83.489	8.100	0.651	1.00	28.14	A	C
ATOM	3175	NH1	ARG	590	82.676	7.823	-0.363	1.00	28.73	A	N
ATOM	3176	NH2	ARG	590	84.007	7.108	1.362	1.00	27.89	A	N
ATOM	3177	C	ARG	590	87.509	12.054	-1.926	1.00	27.18	A	C
ATOM	3178	O	ARG	590	88.646	11.632	-1.694	1.00	27.02	A	O
ATOM	3179	N	THR	591	87.082	12.418	-3.126	1.00	29.00	A	N
ATOM	3180	CA	THR	591	87.873	12.207	-4.323	1.00	31.13	A	C
ATOM	3181	CB	THR	591	87.238	12.907	-5.544	1.00	30.79	A	C
ATOM	3182	OG1	THR	591	85.846	12.561	-5.651	1.00	31.64	A	O

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ATOM	3183	CG2	THR	591	87.974	12.502	-6.805	1.00	30.10	A	C
ATOM	3184	C	THR	591	89.261	12.804	-4.114	1.00	33.07	A	C
ATOM	3185	O	THR	591	90.267	12.190	-4.471	1.00	33.17	A	O
ATOM	3186	N	TYR	592	89.304	13.974	-3.480	1.00	35.13	A	N
ATOM	3187	CA	TYR	592	90.559	14.666	-3.239	1.00	37.29	A	C
ATOM	3188	CB	TYR	592	90.318	16.033	-2.608	1.00	39.44	A	C
ATOM	3189	CG	TYR	592	91.617	16.721	-2.281	1.00	42.57	A	C
ATOM	3190	CD1	TYR	592	92.547	16.992	-3.282	1.00	44.61	A	C
ATOM	3191	CE1	TYR	592	93.771	17.580	-2.988	1.00	46.11	A	C
ATOM	3192	CD2	TYR	592	91.943	17.058	-0.972	1.00	43.77	A	C
ATOM	3193	CE2	TYR	592	93.168	17.651	-0.661	1.00	45.23	A	C
ATOM	3194	CZ	TYR	592	94.077	17.909	-1.676	1.00	46.38	A	C
ATOM	3195	OH	TYR	592	95.287	18.505	-1.391	1.00	48.54	A	O
ATOM	3196	C	TYR	592	91.578	13.916	-2.397	1.00	38.06	A	C
ATOM	3197	O	TYR	592	92.541	13.343	-2.914	1.00	38.52	A	O
ATOM	3198	N	ASN	593	91.382	13.973	-1.089	1.00	38.95	A	N
ATOM	3199	CA	ASN	593	92.288	13.333	-0.155	1.00	40.00	A	C
ATOM	3200	CB	ASN	593	91.674	13.320	1.244	1.00	41.60	A	C
ATOM	3201	CG	ASN	593	91.167	14.703	1.671	1.00	43.25	A	C
ATOM	3202	OD1	ASN	593	91.824	15.428	2.436	1.00	43.75	A	O
ATOM	3203	ND2	ASN	593	89.991	15.075	1.165	1.00	44.26	A	N
ATOM	3204	C	ASN	593	92.671	11.933	-0.617	1.00	40.03	A	C
ATOM	3205	O	ASN	593	93.834	11.539	-0.517	1.00	39.96	A	O
ATOM	3206	N	ALA	594	91.715	11.239	-1.228	1.00	39.79	A	N
ATOM	3207	CA	ALA	594	91.936	9.887	-1.733	1.00	39.61	A	C
ATOM	3208	CB	ALA	594	90.711	9.423	-2.505	1.00	39.26	A	C
ATOM	3209	C	ALA	594	93.169	9.810	-2.630	1.00	39.49	A	C
ATOM	3210	O	ALA	594	94.233	9.327	-2.222	1.00	39.41	A	O
ATOM	3211	N	SER	595	93.013	10.312	-3.848	1.00	39.21	A	N
ATOM	3212	CA	SER	595	94.084	10.309	-4.828	1.00	39.22	A	C
ATOM	3213	CB	SER	595	93.574	10.838	-6.170	1.00	38.34	A	C
ATOM	3214	OG	SER	595	92.999	12.122	-6.044	1.00	37.97	A	O
ATOM	3215	C	SER	595	95.311	11.098	-4.387	1.00	40.09	A	C
ATOM	3216	O	SER	595	96.384	10.964	-4.983	1.00	40.89	A	O
ATOM	3217	N	ILE	596	95.177	11.910	-3.343	1.00	40.47	A	N
ATOM	3218	CA	ILE	596	96.330	12.676	-2.909	1.00	41.20	A	C
ATOM	3219	CB	ILE	596	95.963	14.118	-2.470	1.00	42.42	A	C
ATOM	3220	CG2	ILE	596	95.154	14.113	-1.203	1.00	41.76	A	C
ATOM	3221	CG1	ILE	596	97.241	14.933	-2.246	1.00	43.96	A	C
ATOM	3222	CD1	ILE	596	98.236	14.899	-3.419	1.00	44.09	A	C
ATOM	3223	C	ILE	596	97.171	11.957	-1.866	1.00	41.00	A	C
ATOM	3224	O	ILE	596	98.381	11.793	-2.055	1.00	39.81	A	O
ATOM	3225	N	THR	597	96.532	11.506	-0.788	1.00	41.63	A	N
ATOM	3226	CA	THR	597	97.236	10.785	0.272	1.00	42.47	A	C
ATOM	3227	CB	THR	597	96.264	10.128	1.269	1.00	42.61	A	C
ATOM	3228	OG1	THR	597	95.351	9.277	0.561	1.00	43.34	A	O
ATOM	3229	CG2	THR	597	95.486	11.185	2.039	1.00	43.66	A	C
ATOM	3230	C	THR	597	98.013	9.679	-0.410	1.00	43.05	A	C
ATOM	3231	O	THR	597	99.175	9.405	-0.079	1.00	43.27	A	O
ATOM	3232	N	LEU	598	97.366	9.093	-1.410	1.00	43.57	A	N
ATOM	3233	CA	LEU	598	97.965	8.034	-2.182	1.00	44.04	A	C
ATOM	3234	CB	LEU	598	96.968	7.510	-3.208	1.00	43.65	A	C
ATOM	3235	CG	LEU	598	97.588	6.628	-4.299	1.00	43.80	A	C
ATOM	3236	CD1	LEU	598	96.634	5.501	-4.661	1.00	43.67	A	C
ATOM	3237	CD2	LEU	598	97.975	7.457	-5.527	1.00	42.22	A	C
ATOM	3238	C	LEU	598	99.200	8.562	-2.886	1.00	44.79	A	C
ATOM	3239	O	LEU	598	100.272	7.955	-2.812	1.00	44.63	A	O
ATOM	3240	N	GLN	599	99.044	9.708	-3.542	1.00	46.29	A	N
ATOM	3241	CA	GLN	599	100.130	10.326	-4.283	1.00	48.49	A	C
ATOM	3242	CB	GLN	599	99.749	11.743	-4.708	1.00	48.74	A	C
ATOM	3243	CG	GLN	599	100.154	12.057	-6.141	1.00	48.94	A	C
ATOM	3244	CD	GLN	599	100.656	13.479	-6.334	1.00	49.34	A	C

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ATOM	3245	OE1	GLN	599	100.992	14.176	-5.368	1.00	49.78	A	O
ATOM	3246	NE2	GLN	599	100.734	13.909	-7.590	1.00	49.31	A	N
ATOM	3247	C	GLN	599	101.443	10.344	-3.499	1.00	49.81	A	C
ATOM	3248	O	GLN	599	102.531	10.272	-4.075	1.00	49.64	A	O
ATOM	3249	N	GLN	600	101.339	10.379	-2.179	1.00	51.24	A	N
ATOM	3250	CA	GLN	600	102.530	10.394	-1.353	1.00	52.35	A	C
ATOM	3251	CB	GLN	600	102.256	11.158	-0.066	1.00	54.44	A	C
ATOM	3252	CG	GLN	600	103.298	11.349	0.789	1.00	58.43	A	C
ATOM	3253	CD	GLN	600	103.161	11.545	2.251	1.00	60.84	A	C
ATOM	3254	OE1	GLN	600	102.048	11.228	2.687	1.00	62.38	A	O
ATOM	3255	NE2	GLN	600	104.122	12.059	3.025	1.00	62.09	A	N
ATOM	3256	C	GLN	600	103.035	8.999	-1.006	1.00	51.26	A	C
ATOM	3257	O	GLN	600	104.240	8.773	-0.903	1.00	50.55	A	O
ATOM	3258	N	GLN	601	102.109	8.072	-0.805	1.00	50.59	A	N
ATOM	3259	CA	GLN	601	102.478	6.719	-0.436	1.00	50.75	A	C
ATOM	3260	CB	GLN	601	101.247	5.830	-0.372	1.00	50.98	A	C
ATOM	3261	CG	GLN	601	100.208	6.349	0.595	1.00	52.43	A	C
ATOM	3262	CD	GLN	601	100.824	6.868	1.893	1.00	53.23	A	C
ATOM	3263	OE1	GLN	601	101.070	6.103	2.833	1.00	53.59	A	O
ATOM	3264	NE2	GLN	601	101.088	8.176	1.941	1.00	53.44	A	N
ATOM	3265	C	GLN	601	103.503	6.129	-1.365	1.00	50.75	A	C
ATOM	3266	O	GLN	601	104.598	5.755	-0.940	1.00	50.25	A	O
ATOM	3267	N	LEU	602	103.170	6.103	-2.649	1.00	51.60	A	N
ATOM	3268	CA	LEU	602	104.076	5.561	-3.658	1.00	52.15	A	C
ATOM	3269	CB	LEU	602	103.351	5.412	-4.999	1.00	51.61	A	C
ATOM	3270	CG	LEU	602	102.248	4.346	-5.012	1.00	50.65	A	C
ATOM	3271	CD1	LEU	602	101.324	4.570	-6.181	1.00	50.02	A	C
ATOM	3272	CD2	LEU	602	102.849	2.946	-5.057	1.00	50.16	A	C
ATOM	3273	C	LEU	602	105.339	6.413	-3.794	1.00	52.64	A	C
ATOM	3274	O	LEU	602	106.175	6.181	-4.672	1.00	51.94	A	O
ATOM	3275	N	LYS	603	105.439	7.423	-2.932	1.00	53.73	A	N
ATOM	3276	CA	LYS	603	106.589	8.310	-2.886	1.00	54.33	A	C
ATOM	3277	CB	LYS	603	106.147	9.770	-2.736	1.00	54.87	A	C
ATOM	3278	CG	LYS	603	107.282	10.802	-2.800	1.00	55.64	A	C
ATOM	3279	CD	LYS	603	107.431	11.465	-4.192	1.00	55.91	A	C
ATOM	3280	CE	LYS	603	108.316	10.672	-5.172	1.00	55.80	A	C
ATOM	3281	NZ	LYS	603	107.715	9.390	-5.651	1.00	55.88	A	N
ATOM	3282	C	LYS	603	107.359	7.872	-1.653	1.00	54.18	A	C
ATOM	3283	O	LYS	603	108.589	7.929	-1.622	1.00	54.49	A	O
ATOM	3284	N	GLU	604	106.624	7.402	-0.648	1.00	54.23	A	N
ATOM	3285	CA	GLU	604	107.236	6.947	0.588	1.00	54.42	A	C
ATOM	3286	CB	GLU	604	106.355	7.285	1.789	1.00	54.38	A	C
ATOM	3287	CG	GLU	604	106.285	8.773	2.092	1.00	55.30	A	C
ATOM	3288	CD	GLU	604	107.666	9.446	2.169	1.00	56.40	A	C
ATOM	3289	OE1	GLU	604	108.679	8.767	2.489	1.00	56.38	A	O
ATOM	3290	OE2	GLU	604	107.733	10.673	1.906	1.00	56.51	A	O
ATOM	3291	C	GLU	604	107.592	5.473	0.607	1.00	54.47	A	C
ATOM	3292	O	GLU	604	108.762	5.114	0.484	1.00	54.58	A	O
ATOM	3293	N	LEU	605	106.574	4.627	0.723	1.00	54.79	A	N
ATOM	3294	CA	LEU	605	106.745	3.174	0.798	1.00	55.45	A	C
ATOM	3295	CB	LEU	605	105.394	2.517	1.092	1.00	55.61	A	C
ATOM	3296	CG	LEU	605	104.545	3.218	2.155	1.00	55.66	A	C
ATOM	3297	CD1	LEU	605	103.269	2.416	2.406	1.00	56.32	A	C
ATOM	3298	CD2	LEU	605	105.353	3.391	3.441	1.00	55.48	A	C
ATOM	3299	C	LEU	605	107.366	2.518	-0.432	1.00	55.80	A	C
ATOM	3300	O	LEU	605	107.357	1.288	-0.563	1.00	55.90	A	O
ATOM	3301	N	THR	606	107.940	3.332	-1.311	1.00	56.34	A	N
ATOM	3302	CA	THR	606	108.543	2.825	-2.537	1.00	57.40	A	C
ATOM	3303	CB	THR	606	108.030	3.616	-3.742	1.00	57.98	A	C
ATOM	3304	OG1	THR	606	106.602	3.744	-3.642	1.00	58.16	A	O
ATOM	3305	CG2	THR	606	108.404	2.902	-5.056	1.00	58.03	A	C
ATOM	3306	C	THR	606	110.064	2.871	-2.511	1.00	57.44	A	C

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ATOM	3307	O	THR	606	110.658	3.925	-2.272	1.00	57.82	A	O
ATOM	3308	N	ALA	607	110.682	1.734	-2.820	1.00	57.32	A	N
ATOM	3309	CA	ALA	607	112.137	1.614	-2.807	1.00	57.24	A	C
ATOM	3310	CB	ALA	607	112.549	0.373	-2.025	1.00	57.80	A	C
ATOM	3311	C	ALA	607	112.782	1.593	-4.178	1.00	56.74	A	C
ATOM	3312	O	ALA	607	112.447	0.763	-5.015	1.00	56.49	A	O
ATOM	3313	N	PRO	608	113.754	2.487	-4.404	1.00	56.50	A	N
ATOM	3314	CD	PRO	608	114.157	3.530	-3.446	1.00	56.77	A	C
ATOM	3315	CA	PRO	608	114.502	2.628	-5.653	1.00	57.13	A	C
ATOM	3316	CB	PRO	608	115.630	3.569	-5.250	1.00	56.91	A	C
ATOM	3317	CG	PRO	608	114.929	4.488	-4.321	1.00	56.84	A	C
ATOM	3318	C	PRO	608	115.042	1.305	-6.198	1.00	57.79	A	C
ATOM	3319	O	PRO	608	114.701	0.897	-7.319	1.00	57.81	A	O
ATOM	3320	N	ALA	609	115.871	0.632	-5.403	1.00	57.88	A	N
ATOM	3321	CA	ALA	609	116.452	-0.646	-5.822	1.00	57.59	A	C
ATOM	3322	CB	ALA	609	117.490	-1.105	-4.799	1.00	57.97	A	C
ATOM	3323	C	ALA	609	115.398	-1.749	-6.051	1.00	57.21	A	C
ATOM	3324	O	ALA	609	115.477	-2.497	-7.038	1.00	57.38	A	O
ATOM	3325	N	ALA	610	114.393	-1.786	-5.168	1.00	56.33	A	N
ATOM	3326	CA	ALA	610	113.293	-2.765	-5.172	1.00	55.29	A	C
ATOM	3327	CB	ALA	610	112.064	-2.168	-4.487	1.00	54.42	A	C
ATOM	3328	C	ALA	610	112.883	-3.453	-6.485	1.00	54.67	A	C
ATOM	3329	O	ALA	610	112.768	-2.819	-7.539	1.00	53.96	A	O
ATOM	3330	N	ALA	611	112.665	-4.766	-6.388	1.00	54.78	A	N
ATOM	3331	CA	ALA	611	112.252	-5.599	-7.521	1.00	54.29	A	C
ATOM	3332	CB	ALA	611	112.520	-7.077	-7.229	1.00	53.86	A	C
ATOM	3333	C	ALA	611	110.773	-5.399	-7.791	1.00	53.50	A	C
ATOM	3334	O	ALA	611	109.999	-5.114	-6.882	1.00	53.74	A	O
ATOM	3335	N	ILE	612	110.384	-5.593	-9.042	1.00	53.02	A	N
ATOM	3336	CA	ILE	612	108.993	-5.434	-9.439	1.00	52.87	A	C
ATOM	3337	CB	ILE	612	108.785	-5.879	-10.912	1.00	53.07	A	C
ATOM	3338	CG2	ILE	612	107.338	-6.306	-11.161	1.00	51.99	A	C
ATOM	3339	CG1	ILE	612	109.219	-4.750	-11.856	1.00	53.79	A	C
ATOM	3340	CD1	ILE	612	110.648	-4.243	-11.625	1.00	53.87	A	C
ATOM	3341	C	ILE	612	108.023	-6.154	-8.505	1.00	52.04	A	C
ATOM	3342	O	ILE	612	107.192	-5.514	-7.868	1.00	51.20	A	O
ATOM	3343	N	PRO	613	108.160	-7.485	-8.366	1.00	52.13	A	N
ATOM	3344	CD	PRO	613	109.226	-8.344	-8.919	1.00	52.39	A	C
ATOM	3345	CA	PRO	613	107.273	-8.261	-7.490	1.00	51.99	A	C
ATOM	3346	CB	PRO	613	108.002	-9.600	-7.382	1.00	52.35	A	C
ATOM	3347	CG	PRO	613	108.650	-9.724	-8.732	1.00	52.29	A	C
ATOM	3348	C	PRO	613	107.147	-7.593	-6.131	1.00	51.68	A	C
ATOM	3349	O	PRO	613	106.047	-7.419	-5.597	1.00	50.83	A	O
ATOM	3350	N	ALA	614	108.296	-7.193	-5.601	1.00	51.85	A	N
ATOM	3351	CA	ALA	614	108.357	-6.521	-4.319	1.00	52.28	A	C
ATOM	3352	C3	ALA	614	109.808	-6.291	-3.917	1.00	52.19	A	C
ATOM	3353	C	ALA	614	107.637	-5.198	-4.494	1.00	52.43	A	C
ATOM	3354	O	ALA	614	106.658	-4.920	-3.806	1.00	52.26	A	O
ATOM	3355	N	LYS	615	108.112	-4.422	-5.464	1.00	52.76	A	N
ATOM	3356	CA	LYS	615	107.554	-3.121	-5.802	1.00	52.97	A	C
ATOM	3357	CB	LYS	615	108.035	-2.710	-7.192	1.00	53.82	A	C
ATOM	3358	CG	LYS	615	109.470	-2.247	-7.271	1.00	55.09	A	C
ATOM	3359	CD	LYS	615	109.617	-0.853	-6.677	1.00	56.51	A	C
ATOM	3360	CE	LYS	615	110.683	-0.042	-7.416	1.00	56.91	A	C
ATOM	3361	NZ	LYS	615	110.370	0.130	-8.873	1.00	56.23	A	N
ATOM	3362	C	LYS	615	106.035	-3.201	-5.815	1.00	52.70	A	C
ATOM	3363	O	LYS	615	105.346	-2.361	-5.232	1.00	52.33	A	O
ATOM	3364	N	ILE	616	105.533	-4.235	-6.479	1.00	52.29	A	N
ATOM	3365	CA	ILE	616	104.107	-4.468	-6.589	1.00	52.19	A	C
ATOM	3366	CB	ILE	616	103.822	-5.829	-7.208	1.00	53.14	A	C
ATOM	3367	CG2	ILE	616	102.316	-6.059	-7.288	1.00	53.45	A	C
ATOM	3368	CG1	ILE	616	104.470	-5.920	-8.587	1.00	53.70	A	C

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ATOM	3369	CD1	ILE	616	104.523	-7.329	-9.128	1.00	54.89	A	C
ATOM	3370	C	ILE	616	103.513	-4.466	-5.200	1.00	51.66	A	C
ATOM	3371	O	ILE	616	102.654	-3.649	-4.878	1.00	51.04	A	O
ATOM	3372	N	LEU	617	103.979	-5.394	-4.378	1.00	51.59	A	N
ATOM	3373	CA	LEU	617	103.500	-5.486	-3.015	1.00	51.90	A	C
ATOM	3374	CB	LEU	617	104.321	-6.536	-2.256	1.00	52.35	A	C
ATOM	3375	CG	LEU	617	103.954	-6.915	-0.816	1.00	52.56	A	C
ATOM	3376	CD1	LEU	617	104.796	-6.120	0.181	1.00	51.95	A	C
ATOM	3377	CD2	LEU	617	102.450	-6.729	-0.580	1.00	52.73	A	C
ATOM	3378	C	LEU	617	103.622	-4.092	-2.389	1.00	51.46	A	C
ATOM	3379	O	LEU	617	102.638	-3.550	-1.878	1.00	51.09	A	O
ATOM	3380	N	SER	618	104.794	-3.477	-2.560	1.00	51.37	A	N
ATOM	3381	CA	SER	618	105.071	-2.134	-2.040	1.00	51.57	A	C
ATOM	3382	CB	SER	618	106.402	-1.589	-2.593	1.00	52.26	A	C
ATOM	3383	OG	SER	618	107.511	-2.393	-2.208	1.00	52.32	A	O
ATOM	3384	C	SER	618	103.936	-1.191	-2.418	1.00	50.91	A	C
ATOM	3385	O	SER	618	103.504	-0.355	-1.618	1.00	50.63	A	O
ATOM	3386	N	TYR	619	103.424	-1.386	-3.628	1.00	50.38	A	N
ATOM	3387	CA	TYR	619	102.332	-0.585	-4.156	1.00	50.10	A	C
ATOM	3388	CB	TYR	619	102.113	-0.932	-5.627	1.00	50.35	A	C
ATOM	3389	CG	TYR	619	100.919	-0.264	-6.252	1.00	51.63	A	C
ATOM	3390	CD1	TYR	619	101.081	0.832	-7.092	1.00	52.26	A	C
ATOM	3391	CE1	TYR	619	99.987	1.450	-7.689	1.00	53.10	A	C
ATOM	3392	CD2	TYR	619	99.623	-0.733	-6.017	1.00	52.59	A	C
ATOM	3393	CE2	TYR	619	98.519	-0.122	-6.605	1.00	53.26	A	C
ATOM	3394	CZ	TYR	619	98.711	0.971	-7.443	1.00	53.28	A	C
ATOM	3395	OH	TYR	619	97.639	1.587	-8.043	1.00	53.52	A	O
ATOM	3396	C	TYR	619	101.038	-0.799	-3.385	1.00	49.35	A	C
ATOM	3397	O	TYR	619	100.427	0.151	-2.894	1.00	48.61	A	O
ATOM	3398	N	ASN	620	100.607	-2.051	-3.318	1.00	48.87	A	N
ATOM	3399	CA	ASN	620	99.373	-2.390	-2.632	1.00	49.22	A	C
ATOM	3400	CB	ASN	620	99.183	-3.900	-2.623	1.00	48.92	A	C
ATOM	3401	CG	ASN	620	99.066	-4.470	-4.018	1.00	48.81	A	C
ATOM	3402	OD1	ASN	620	100.073	-4.718	-4.686	1.00	48.97	A	O
ATOM	3403	ND2	ASN	620	97.831	-4.652	-4.482	1.00	49.28	A	N
ATOM	3404	C	ASN	620	99.350	-1.852	-1.223	1.00	49.60	A	C
ATOM	3405	O	ASN	620	98.336	-1.331	-0.763	1.00	49.54	A	O
ATOM	3406	N	ARG	621	100.495	-1.938	-0.563	1.00	50.88	A	N
ATOM	3407	CA	ARG	621	100.629	-1.458	0.802	1.00	52.81	A	C
ATOM	3408	CB	ARG	621	102.058	-1.683	1.291	1.00	54.60	A	C
ATOM	3409	CG	ARG	621	102.617	-3.074	0.976	1.00	56.68	A	C
ATOM	3410	CD	ARG	621	104.043	-3.244	1.500	1.00	58.57	A	C
ATOM	3411	NE	ARG	621	104.923	-2.135	1.127	1.00	60.46	A	N
ATOM	3412	CZ	ARG	621	106.249	-2.218	1.047	1.00	61.41	A	C
ATOM	3413	NH1	ARG	621	106.864	-3.368	1.309	1.00	61.79	A	N
ATOM	3414	NH2	ARG	621	106.962	-1.147	0.710	1.00	61.46	A	N
ATOM	3415	C	ARG	621	100.280	0.029	0.882	1.00	53.06	A	C
ATOM	3416	O	ARG	621	99.832	0.519	1.924	1.00	53.06	A	O
ATOM	3417	N	ALA	622	100.474	0.737	-0.228	1.00	53.40	A	N
ATOM	3418	CA	ALA	622	100.178	2.166	-0.289	1.00	53.75	A	C
ATOM	3419	CB	ALA	622	100.699	2.746	-1.595	1.00	53.34	A	C
ATOM	3420	C	ALA	622	98.676	2.406	-0.169	1.00	53.74	A	C
ATOM	3421	O	ALA	622	98.209	3.221	0.635	1.00	53.62	A	O
ATOM	3422	N	ASN	623	97.927	1.627	-0.933	1.00	53.96	A	N
ATOM	3423	CA	ASN	623	96.479	1.725	-0.975	1.00	54.70	A	C
ATOM	3424	CB	ASN	623	95.955	0.830	-2.096	1.00	54.89	A	C
ATOM	3425	CG	ASN	623	96.763	0.983	-3.384	1.00	55.00	A	C
ATOM	3426	OD1	ASN	623	97.976	0.730	-3.410	1.00	55.09	A	O
ATOM	3427	ND2	ASN	623	96.097	1.412	-4.454	1.00	54.53	A	N
ATOM	3428	C	ASN	623	95.795	1.402	0.353	1.00	55.06	A	C
ATOM	3429	O	ASN	623	94.683	1.877	0.612	1.00	55.17	A	O
ATOM	3430	N	ARG	624	96.454	0.587	1.179	1.00	55.52	A	N

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ATOM	3431	CA	ARG	624	95.933	0.207	2.501	1.00	56.21	A	C
ATOM	3432	CB	ARG	624	96.951	-0.706	3.217	1.00	58.12	A	C
ATOM	3433	CG	ARG	624	96.618	-1.080	4.684	1.00	61.52	A	C
ATOM	3434	CD	ARG	624	97.864	-1.577	5.478	1.00	63.99	A	C
ATOM	3435	NE	ARG	624	97.776	-2.987	5.894	1.00	65.57	A	N
ATOM	3436	CZ	ARG	624	98.549	-3.572	6.819	1.00	65.44	A	C
ATOM	3437	NH1	ARG	624	99.495	-2.884	7.458	1.00	65.30	A	N
ATOM	3438	NH2	ARG	624	98.380	-4.862	7.107	1.00	64.68	A	N
ATOM	3439	C	ARG	624	95.739	1.495	3.312	1.00	55.47	A	C
ATOM	3440	O	ARG	624	94.648	1.789	3.828	1.00	54.67	A	O
ATOM	3441	N	ALA	625	96.813	2.280	3.343	1.00	54.69	A	N
ATOM	3442	CA	ALA	625	96.871	3.546	4.051	1.00	53.96	A	C
ATOM	3443	CB	ALA	625	98.219	4.206	3.794	1.00	53.80	A	C
ATOM	3444	C	ALA	625	95.760	4.468	3.605	1.00	53.30	A	C
ATOM	3445	O	ALA	625	95.244	5.259	4.382	1.00	53.51	A	O
ATOM	3446	N	VAL	626	95.396	4.356	2.340	1.00	52.86	A	N
ATOM	3447	CA	VAL	626	94.362	5.201	1.781	1.00	52.95	A	C
ATOM	3448	CB	VAL	626	94.339	5.043	0.255	1.00	52.49	A	C
ATOM	3449	CG1	VAL	626	93.559	6.179	-0.385	1.00	51.96	A	C
ATOM	3450	CG2	VAL	626	95.770	5.016	-0.273	1.00	51.89	A	C
ATOM	3451	C	VAL	626	92.978	4.954	2.403	1.00	53.57	A	C
ATOM	3452	O	VAL	626	92.412	5.842	3.048	1.00	52.79	A	O
ATOM	3453	N	ALA	627	92.457	3.738	2.254	1.00	55.05	A	N
ATOM	3454	CA	ALA	627	91.140	3.401	2.806	1.00	56.35	A	C
ATOM	3455	CB	ALA	627	90.697	2.015	2.334	1.00	56.32	A	C
ATOM	3456	C	ALA	627	91.136	3.461	4.328	1.00	56.84	A	C
ATOM	3457	O	ALA	627	90.102	3.235	4.964	1.00	56.32	A	O
ATOM	3458	N	ILE	628	92.295	3.794	4.894	1.00	58.25	A	N
ATOM	3459	CA	ILE	628	92.478	3.896	6.335	1.00	60.45	A	C
ATOM	3460	CB	ILE	628	93.959	4.224	6.674	1.00	60.17	A	C
ATOM	3461	CG2	ILE	628	94.141	5.714	6.996	1.00	60.09	A	C
ATOM	3462	CG1	ILE	628	94.442	3.367	7.845	1.00	60.46	A	C
ATOM	3463	CD1	ILE	628	94.620	1.900	7.501	1.00	60.08	A	C
ATOM	3464	C	ILE	628	91.572	4.954	6.968	1.00	62.72	A	C
ATOM	3465	O	ILE	628	91.397	4.983	8.190	1.00	62.66	A	O
ATOM	3466	N	LEU	629	91.009	5.823	6.129	1.00	65.60	A	N
ATOM	3467	CA	LEU	629	90.137	6.903	6.595	1.00	68.13	A	C
ATOM	3468	CB	LEU	629	90.700	8.261	6.161	1.00	68.94	A	C
ATOM	3469	CG	LEU	629	91.154	8.365	4.698	1.00	70.02	A	C
ATOM	3470	CD1	LEU	629	90.623	9.653	4.082	1.00	70.39	A	C
ATOM	3471	CD2	LEU	629	92.683	8.295	4.605	1.00	70.44	A	C
ATOM	3472	C	LEU	629	88.678	6.786	6.149	1.00	69.53	A	C
ATOM	3473	O	LEU	629	87.769	7.220	6.871	1.00	69.77	A	O
ATOM	3474	N	CYS	630	88.457	6.220	4.961	1.00	70.59	A	N
ATOM	3475	CA	CYS	630	87.104	6.048	4.424	1.00	72.15	A	C
ATOM	3476	CB	CYS	630	87.157	5.505	2.989	1.00	72.46	A	C
ATOM	3477	SG	CYS	630	87.931	6.594	1.763	1.00	74.14	A	S
ATOM	3478	C	CYS	630	86.266	5.103	5.292	1.00	73.07	A	C
ATOM	3479	O	CYS	630	85.034	5.045	5.150	1.00	73.07	A	O
ATOM	3480	N	ASN	631	86.948	4.371	6.182	1.00	74.02	A	N
ATOM	3481	CA	ASN	631	86.334	3.396	7.093	1.00	74.89	A	C
ATOM	3482	CB	ASN	631	85.174	4.027	7.899	1.00	75.17	A	C
ATOM	3483	CG	ASN	631	85.059	3.472	9.334	1.00	75.34	A	C
ATOM	3484	OD1	ASN	631	84.210	2.619	9.626	1.00	75.12	A	O
ATOM	3485	ND2	ASN	631	85.890	3.994	10.239	1.00	75.13	A	N
ATOM	3486	C	ASN	631	85.834	2.205	6.276	1.00	75.59	A	C
ATOM	3487	O	ASN	631	85.389	1.201	6.839	1.00	75.45	A	O
ATOM	3488	N	HIS	632	85.930	2.329	4.949	1.00	76.58	A	N
ATOM	3489	CA	HIS	632	85.510	1.294	4.007	1.00	78.01	A	C
ATOM	3490	CB	HIS	632	86.118	1.549	2.612	1.00	78.73	A	C
ATOM	3491	CG	HIS	632	85.328	2.489	1.742	1.00	79.89	A	C
ATOM	3492	CD2	HIS	632	85.372	2.704	0.404	1.00	80.39	A	C

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ATOM	3493	ND1	HIS	632	84.361	3.341	2.233	1.00	80.20	A	N
ATOM	3494	CE1	HIS	632	83.845	4.038	1.235	1.00	80.31	A	C
ATOM	3495	NE2	HIS	632	84.440	3.671	0.114	1.00	80.23	A	N
ATOM	3496	C	HIS	632	85.978	-0.065	4.523	1.00	78.57	A	C
ATOM	3497	O	HIS	632	85.105	-0.879	4.904	1.00	79.14	A	O
ATOM	3498	OXT	HIS	632	87.213	-0.264	4.605	1.00	78.77	A	O
TER	3499		HIS	632						A	
ATOM	3500	CB	ARG	708	91.742	-14.886	0.550	1.00	81.63	B	C
ATOM	3501	CG	ARG	708	90.892	-14.298	-0.574	1.00	82.30	B	C
ATOM	3502	CD	ARG	708	91.691	-13.334	-1.437	1.00	83.28	B	C
ATOM	3503	NE	ARG	708	91.202	-13.206	-2.812	1.00	83.94	B	N
ATOM	3504	CZ	ARG	708	90.009	-12.733	-3.175	1.00	84.48	B	C
ATOM	3505	NH1	ARG	708	89.124	-12.341	-2.266	1.00	84.56	B	N
ATOM	3506	NH2	ARG	708	89.739	-12.562	-4.468	1.00	84.60	B	N
ATOM	3507	C	ARG	708	92.776	-14.406	2.782	1.00	80.24	B	C
ATOM	3508	O	ARG	708	92.014	-15.251	3.265	1.00	80.10	B	O
ATOM	3509	N	ARG	708	93.821	-13.523	0.673	1.00	81.03	B	N
ATOM	3510	CA	ARG	708	92.547	-13.868	1.368	1.00	80.96	B	C
ATOM	3511	N	GLU	709	93.831	-13.927	3.439	1.00	79.46	B	N
ATOM	3512	CA	GLU	709	94.117	-14.362	4.800	1.00	78.47	B	C
ATOM	3513	CB	GLU	709	95.541	-14.916	4.927	1.00	77.73	B	C
ATOM	3514	CG	GLU	709	95.628	-16.241	5.718	1.00	77.22	B	C
ATOM	3515	CD	GLU	709	95.114	-16.148	7.166	1.00	77.06	B	C
ATOM	3516	OE1	GLU	709	95.949	-16.000	8.089	1.00	76.81	B	O
ATOM	3517	OE2	GLU	709	93.882	-16.252	7.385	1.00	76.34	B	O
ATOM	3518	C	GLU	709	93.893	-13.221	5.791	1.00	77.95	B	C
ATOM	3519	O	GLU	709	92.994	-13.303	6.636	1.00	78.30	B	O
ATOM	3520	N	GLU	710	94.700	-12.163	5.687	1.00	77.45	B	N
ATOM	3521	CA	GLU	710	94.559	-11.015	6.590	1.00	77.35	B	C
ATOM	3522	CB	GLU	710	95.837	-10.169	6.607	1.00	77.27	B	C
ATOM	3523	CG	GLU	710	95.972	-9.278	7.847	1.00	77.09	B	C
ATOM	3524	CD	GLU	710	97.361	-8.671	7.988	1.00	77.01	B	C
ATOM	3525	OE1	GLU	710	97.519	-7.467	7.677	1.00	76.85	B	O
ATOM	3526	OE2	GLU	710	98.294	-9.398	8.413	1.00	76.81	B	O
ATOM	3527	C	GLU	710	93.348	-10.176	6.174	1.00	77.17	B	C
ATOM	3528	O	GLU	710	92.813	-9.371	6.955	1.00	76.97	B	O
ATOM	3529	N	ASN	711	92.931	-10.378	4.927	1.00	77.45	B	N
ATOM	3530	CA	ASN	711	91.770	-9.697	4.380	1.00	77.46	B	C
ATOM	3531	CB	ASN	711	92.141	-8.812	3.180	1.00	76.78	B	C
ATOM	3532	CG	ASN	711	90.924	-8.110	2.575	1.00	76.56	B	C
ATOM	3533	OD1	ASN	711	89.995	-7.729	3.295	1.00	75.93	B	O
ATOM	3534	ND2	ASN	711	90.914	-7.961	1.247	1.00	76.27	B	N
ATOM	3535	C	ASN	711	90.730	-10.739	3.964	1.00	77.39	B	C
ATOM	3536	O	ASN	711	91.033	-11.700	3.243	1.00	77.40	B	O
ATOM	3537	N	ALA	712	89.513	-10.541	4.460	1.00	77.23	B	N
ATOM	3538	CA	ALA	712	88.370	-11.402	4.174	1.00	76.73	B	C
ATOM	3539	CB	ALA	712	88.470	-12.708	4.966	1.00	77.45	B	C
ATOM	3540	C	ALA	712	87.153	-10.602	4.612	1.00	75.90	B	C
ATOM	3541	O	ALA	712	86.072	-11.150	4.833	1.00	76.00	B	O
ATOM	3542	N	GLN	713	87.354	-9.288	4.709	1.00	75.15	B	N
ATOM	3543	CA	GLN	713	86.325	-8.347	5.135	1.00	74.71	B	C
ATOM	3544	CB	GLN	713	86.449	-8.098	6.643	1.00	75.91	B	C
ATOM	3545	CG	GLN	713	87.865	-8.280	7.194	1.00	77.74	B	C
ATOM	3546	CD	GLN	713	88.853	-7.270	6.634	1.00	79.06	B	C
ATOM	3547	OE1	GLN	713	89.842	-7.633	5.984	1.00	79.19	B	O
ATOM	3548	NE2	GLN	713	88.587	-5.989	6.885	1.00	79.88	B	N
ATOM	3549	C	GLN	713	86.407	-7.030	4.357	1.00	73.43	B	C
ATOM	3550	O	GLN	713	85.388	-6.366	4.126	1.00	72.90	B	O
ATOM	3551	N	ILE	714	87.623	-6.648	3.974	1.00	72.39	B	N
ATOM	3552	CA	ILE	714	87.831	-5.427	3.203	1.00	71.55	B	C
ATOM	3553	CB	ILE	714	89.296	-4.899	3.337	1.00	71.51	B	C
ATOM	3554	CG2	ILE	714	89.656	-3.945	2.197	1.00	71.54	B	C



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ATOM	3555	CG1	ILE	714	89.483	-4.207	4.687	1.00	71.49	B	C
ATOM	3556	CD1	ILE	714	88.437	-3.149	4.992	1.00	71.03	B	C
ATOM	3557	C	ILE	714	87.487	-5.706	1.740	1.00	71.12	B	C
ATOM	3558	O	ILE	714	37.733	-6.811	1.236	1.00	70.96	B	O
ATOM	3559	N	ALA	715	86.884	-4.713	1.084	1.00	69.86	B	N
ATOM	3560	CA	ALA	715	86.484	-4.815	-0.320	1.00	68.40	B	C
ATOM	3561	CB	ALA	715	85.351	-3.832	-0.613	1.00	68.88	B	C
ATOM	3562	C	ALA	715	87.645	-4.608	-1.304	1.00	67.16	B	C
ATOM	3563	O	ALA	715	88.698	-4.063	-0.944	1.00	66.80	B	O
ATOM	3564	N	LEU	716	87.425	-5.033	-2.550	1.00	65.51	B	N
ATOM	3565	CA	LEU	716	88.422	-4.934	-3.619	1.00	64.43	B	C
ATOM	3566	CB	LEU	716	88.009	-5.816	-4.813	1.00	64.49	B	C
ATOM	3567	CG	LEU	716	86.862	-5.369	-5.727	1.00	64.57	B	C
ATOM	3568	CD1	LEU	716	86.726	-6.336	-6.898	1.00	63.95	B	C
ATOM	3569	CD2	LEU	716	85.569	-5.242	-4.941	1.00	64.57	B	C
ATOM	3570	C	LEU	716	88.698	-3.492	-4.077	1.00	63.50	B	C
ATOM	3571	O	LEU	716	88.938	-2.610	-3.241	1.00	63.31	B	O
ATOM	3572	N	GLY	717	88.684	-3.276	-5.397	1.00	62.26	B	N
ATOM	3573	CA	GLY	717	88.929	-1.967	-5.984	1.00	60.84	B	C
ATOM	3574	C	GLY	717	88.223	-0.815	-5.294	1.00	60.23	B	C
ATOM	3575	O	GLY	717	88.898	0.077	-4.781	1.00	59.82	B	O
ATOM	3576	N	THR	718	86.886	-0.856	-5.262	1.00	59.87	B	N
ATOM	3577	CA	THR	718	86.032	0.167	-4.632	1.00	59.25	B	C
ATOM	3578	CB	THR	718	85.730	-0.182	-3.135	1.00	59.36	B	C
ATOM	3579	OG1	THR	718	84.844	-1.310	-3.074	1.00	59.45	B	O
ATOM	3580	CG2	THR	718	85.065	0.983	-2.421	1.00	58.62	B	C
ATOM	3581	C	THR	718	86.573	1.595	-4.787	1.00	59.40	B	C
ATOM	3582	O	THR	718	86.042	2.382	-5.576	1.00	59.07	B	O
ATOM	3583	N	SER	719	87.615	1.919	-4.020	1.00	59.28	B	N
ATOM	3584	CA	SER	719	88.277	3.225	-4.077	1.00	59.17	B	C
ATOM	3585	CB	SER	719	89.447	3.259	-3.087	1.00	59.64	B	C
ATOM	3586	OG	SER	719	90.486	2.366	-3.484	1.00	58.12	B	O
ATOM	3587	C	SER	719	88.838	3.382	-5.484	1.00	58.90	B	C
ATOM	3588	O	SER	719	88.513	4.322	-6.212	1.00	57.76	B	O
ATOM	3589	N	LYS	720	89.697	2.429	-5.834	1.00	59.53	B	N
ATOM	3590	CA	LYS	720	90.350	2.360	-7.131	1.00	60.40	B	C
ATOM	3591	CB	LYS	720	91.080	1.016	-7.251	1.00	62.08	B	C
ATOM	3592	CG	LYS	720	91.790	0.774	-8.576	1.00	64.20	B	C
ATOM	3593	CD	LYS	720	90.988	-0.135	-9.508	1.00	65.67	B	C
ATOM	3594	CE	LYS	720	91.761	-0.407	-10.796	1.00	65.54	B	C
ATOM	3595	NZ	LYS	720	91.109	-1.398	-11.701	1.00	65.11	B	N
ATOM	3596	C	LYS	720	89.280	2.481	-8.202	1.00	59.12	B	C
ATOM	3597	O	LYS	720	89.349	3.360	-9.065	1.00	59.24	B	O
ATOM	3598	N	LEU	721	88.257	1.639	-8.073	1.00	58.09	B	N
ATOM	3599	CA	LEU	721	87.132	1.602	-8.995	1.00	56.93	B	C
ATOM	3600	CB	LEU	721	85.931	0.907	-8.337	1.00	57.12	B	C
ATOM	3601	CG	LEU	721	85.662	-0.577	-8.643	1.00	56.99	B	C
ATOM	3602	CD1	LEU	721	86.929	-1.415	-8.587	1.00	57.21	B	C
ATOM	3603	CD2	LEU	721	84.625	-1.119	-7.678	1.00	56.22	B	C
ATOM	3604	C	LEU	721	86.736	2.983	-9.512	1.00	55.65	B	C
ATOM	3605	O	LEU	721	86.412	3.119	-10.692	1.00	55.24	B	O
ATOM	3606	N	ASN	722	86.808	4.004	-8.651	1.00	54.08	B	N
ATOM	3607	CA	ASN	722	86.460	5.372	-9.045	1.00	52.28	B	C
ATOM	3608	CB	ASN	722	84.998	5.444	-9.560	1.00	53.39	B	C
ATOM	3609	CG	ASN	722	83.956	4.899	-8.556	1.00	53.88	B	C
ATOM	3610	OD1	ASN	722	84.294	4.377	-7.483	1.00	54.10	B	O
ATOM	3611	ND2	ASN	722	82.676	5.021	-8.923	1.00	53.42	B	N
ATOM	3612	C	ASN	722	86.717	6.471	-7.997	1.00	50.43	B	C
ATOM	3613	O	ASN	722	85.856	7.336	-7.767	1.00	50.59	B	O
ATOM	3614	N	PTR	723	87.919	6.489	-7.415	1.00	47.46	B	N
ATOM	3615	CA	PTR	723	88.238	7.497	-6.397	1.00	44.16	B	C
ATOM	3616	CB	PTR	723	88.116	6.902	-4.996	1.00	42.77	B	C

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ATOM	3617	CG	PTR	723	86.719	6.982	-4.476	1.00	41.31	B	C
ATOM	3618	CD1	PTR	723	85.968	5.833	-4.246	1.00	40.91	B	C
ATOM	3619	CE1	PTR	723	84.647	5.917	-3.831	1.00	40.25	B	C
ATOM	3620	CD2	PTR	723	86.121	8.218	-4.272	1.00	41.11	B	C
ATOM	3621	CE2	PTR	723	84.809	8.317	-3.859	1.00	40.70	B	C
ATOM	3622	CZ	PTR	723	84.073	7.166	-3.642	1.00	40.06	B	C
ATOM	3623	OH	PTR	723	82.764	7.331	-3.272	1.00	38.79	B	O
ATOM	3624	C	PTR	723	89.574	8.196	-6.506	1.00	42.17	B	C
ATOM	3625	O	PTR	723	89.723	9.345	-6.092	1.00	42.61	B	O
ATOM	3626	P	PTR	723	81.815	6.156	-2.786	1.00	38.42	B	P
ATOM	3627	O1P	PTR	723	82.485	5.218	-1.844	1.00	39.00	B	O
ATOM	3628	O2P	PTR	723	80.522	6.768	-2.381	1.00	37.17	B	O
ATOM	3629	O3P	PTR	723	81.468	5.303	-4.115	1.00	36.68	B	O
ATOM	3630	N	LEU	724	90.551	7.507	-7.062	1.00	39.32	B	N
ATOM	3631	CA	LEU	724	91.867	8.088	-7.162	1.00	36.80	B	C
ATOM	3632	CB	LEU	724	92.856	7.218	-6.392	1.00	37.88	B	C
ATOM	3633	CG	LEU	724	92.261	6.740	-5.056	1.00	38.10	B	C
ATOM	3634	CD1	LEU	724	91.604	5.374	-5.256	1.00	37.72	B	C
ATOM	3635	CD2	LEU	724	93.324	6.658	-3.968	1.00	38.08	B	C
ATOM	3636	C	LEU	724	92.280	8.227	-8.603	1.00	34.77	B	C
ATOM	3637	O	LEU	724	91.994	7.355	-9.420	1.00	34.63	B	O
ATOM	3638	N	ASP	725	92.896	9.361	-8.922	1.00	32.85	B	N
ATOM	3639	CA	ASP	725	93.364	9.642	-10.269	1.00	31.42	B	C
ATOM	3640	CB	ASP	725	94.049	11.002	-10.299	1.00	31.33	B	C
ATOM	3641	CG	ASP	725	94.398	11.459	-11.701	1.00	31.44	B	C
ATOM	3642	OD1	ASP	725	94.358	10.643	-12.647	1.00	31.38	B	O
ATOM	3643	OD2	ASP	725	94.715	12.655	-11.851	1.00	31.77	B	O
ATOM	3644	C	ASP	725	94.338	8.557	-10.696	1.00	31.27	B	C
ATOM	3645	O	ASP	725	95.391	8.378	-10.089	1.00	30.96	B	O
ATOM	3646	N	PRO	726	93.974	7.794	-11.736	1.00	31.47	B	N
ATOM	3647	CD	PRO	726	92.718	7.923	-12.497	1.00	31.07	B	C
ATOM	3648	CA	PRO	726	94.800	6.705	-12.269	1.00	31.29	B	C
ATOM	3649	CB	PRO	726	93.891	6.083	-13.329	1.00	31.61	B	C
ATOM	3650	CG	PRO	726	93.062	7.252	-13.799	1.00	30.89	B	C
ATOM	3651	C	PRO	726	96.105	7.226	-12.869	1.00	30.94	B	C
ATOM	3652	O	PRO	726	97.131	6.524	-12.869	1.00	30.74	B	O
ATOM	3653	N	ARG	727	96.056	8.460	-13.376	1.00	30.47	B	N
ATOM	3654	CA	ARG	727	97.230	9.096	-13.951	1.00	30.62	B	C
ATOM	3655	CB	ARG	727	96.985	10.587	-14.160	1.00	29.29	B	C
ATOM	3656	CG	ARG	727	96.067	10.906	-15.332	1.00	27.78	B	C
ATOM	3657	CD	ARG	727	95.851	12.407	-15.486	1.00	26.37	B	C
ATOM	3658	NE	ARG	727	94.733	12.906	-14.688	1.00	26.18	B	N
ATOM	3659	CZ	ARG	727	94.536	14.191	-14.405	1.00	26.42	B	C
ATOM	3660	NH1	ARG	727	95.397	15.102	-14.848	1.00	26.78	B	N
ATOM	3661	NH2	ARG	727	93.457	14.575	-13.725	1.00	25.90	B	N
ATOM	3662	C	ARG	727	98.362	8.891	-12.963	1.00	31.52	B	C
ATOM	3663	O	ARG	727	99.481	8.544	-13.337	1.00	32.03	B	O
ATOM	3664	N	ILE	728	98.030	9.011	-11.685	1.00	32.49	B	N
ATOM	3665	CA	ILE	728	99.011	8.810	-10.634	1.00	33.45	B	C
ATOM	3666	CB	ILE	728	98.386	9.004	-9.240	1.00	33.47	B	C
ATOM	3667	CG2	ILE	728	99.428	8.745	-8.158	1.00	33.15	B	C
ATOM	3668	CG1	ILE	728	97.839	10.431	-9.118	1.00	33.54	B	C
ATOM	3669	CD1	ILE	728	97.068	10.694	-7.845	1.00	33.34	B	C
ATOM	3670	C	ILE	728	99.618	7.411	-10.747	1.00	33.66	B	C
ATOM	3671	O	ILE	728	100.827	7.270	-10.948	1.00	34.22	B	O
ATOM	3672	N	THR	729	98.779	6.385	-10.693	1.00	34.01	B	N
ATOM	3673	CA	THR	729	99.280	5.018	-10.786	1.00	35.34	B	C
ATOM	3674	CB	THR	729	98.127	3.992	-10.928	1.00	35.76	B	C
ATOM	3675	OG1	THR	729	97.072	4.313	-10.007	1.00	36.43	B	O
ATOM	3676	CG2	THR	729	98.633	2.579	-10.641	1.00	34.17	B	C
ATOM	3677	C	THR	729	100.184	4.906	-12.010	1.00	35.69	B	C
ATOM	3678	O	THR	729	101.317	4.407	-11.924	1.00	36.13	B	O

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ATOM	3679	N	VAL	730	99.704	5.474	-13.116	1.00	35.95	B	N
ATOM	3680	CA	VAL	730	100.423	5.451	-14.382	1.00	36.08	B	C
ATOM	3681	CB	VAL	730	99.619	6.184	-15.499	1.00	35.56	B	C
ATOM	3682	CG1	VAL	730	100.325	6.065	-16.558	1.00	34.43	B	C
ATOM	3683	CG2	VAL	730	98.204	5.616	-15.581	1.00	34.63	B	C
ATOM	3684	C	VAL	730	101.852	6.002	-14.283	1.00	37.15	B	C
ATOM	3685	O	VAL	730	102.807	5.232	-14.394	1.00	36.98	B	O
ATOM	3686	N	ALA	731	101.995	7.306	-14.026	1.00	37.39	B	N
ATOM	3687	CA	ALA	731	103.313	7.956	-13.925	1.00	38.04	B	C
ATOM	3688	CB	ALA	731	103.153	9.404	-13.480	1.00	37.65	B	C
ATOM	3689	C	ALA	731	104.268	7.213	-12.982	1.00	39.08	B	C
ATOM	3690	O	ALA	731	105.491	7.281	-13.123	1.00	39.26	B	O
ATOM	3691	N	TRP	732	103.686	6.495	-12.029	1.00	39.86	B	N
ATOM	3692	CA	TRP	732	104.436	5.719	-11.063	1.00	40.91	B	C
ATOM	3693	CB	TRP	732	103.505	5.301	-9.944	1.00	42.47	B	C
ATOM	3694	CG	TRP	732	104.075	4.278	-9.060	1.00	45.28	B	C
ATOM	3695	CD2	TRP	732	103.893	2.873	-9.179	1.00	47.02	B	C
ATOM	3696	CE2	TRP	732	104.536	2.274	-8.071	1.00	47.85	B	C
ATOM	3697	CE3	TRP	732	103.241	2.057	-10.113	1.00	47.95	B	C
ATOM	3698	CD1	TRP	732	104.817	4.480	-7.929	1.00	45.63	B	C
ATOM	3699	NE1	TRP	732	105.093	3.280	-7.325	1.00	46.90	B	N
ATOM	3700	CZ2	TRP	732	104.542	0.890	-7.868	1.00	48.84	B	C
ATOM	3701	CZ3	TRP	732	103.246	0.681	-9.914	1.00	48.77	B	C
ATOM	3702	CH2	TRP	732	103.894	0.111	-8.797	1.00	49.41	B	C
ATOM	3703	C	TRP	732	105.029	4.493	-11.737	1.00	41.37	B	C
ATOM	3704	O	TRP	732	106.174	4.122	-11.473	1.00	41.59	B	O
ATOM	3705	N	CYS	733	104.215	3.829	-12.554	1.00	42.53	B	N
ATOM	3706	CA	CYS	733	104.665	2.659	-13.306	1.00	43.58	B	C
ATOM	3707	CB	CYS	733	103.538	2.105	-14.178	1.00	44.15	B	C
ATOM	3708	SG	CYS	733	102.310	1.149	-13.295	1.00	44.91	B	S
ATOM	3709	C	CYS	733	105.796	3.091	-14.219	1.00	43.62	B	C
ATOM	3710	O	CYS	733	106.769	2.378	-14.388	1.00	43.15	B	O
ATOM	3711	N	LYS	734	105.651	4.281	-14.788	1.00	44.18	B	N
ATOM	3712	CA	LYS	734	106.638	4.838	-15.693	1.00	45.15	B	C
ATOM	3713	CB	LYS	734	106.103	6.127	-16.319	1.00	44.56	B	C
ATOM	3714	CG	LYS	734	104.633	6.101	-16.705	1.00	43.91	B	C
ATOM	3715	CD	LYS	734	104.335	5.065	-17.787	1.00	42.93	B	C
ATOM	3716	CE	LYS	734	103.950	5.726	-19.098	1.00	41.82	B	C
ATOM	3717	NZ	LYS	734	102.697	6.517	-18.962	1.00	41.96	B	N
ATOM	3718	C	LYS	734	107.922	5.155	-14.946	1.00	45.89	B	C
ATOM	3719	O	LYS	734	108.985	4.628	-15.270	1.00	45.82	B	O
ATOM	3720	N	ALA	735	107.794	5.984	-13.910	1.00	46.96	B	N
ATOM	3721	CA	ALA	735	108.924	6.433	-13.092	1.00	48.16	B	C
ATOM	3722	CB	ALA	735	108.431	7.304	-11.939	1.00	47.16	B	C
ATOM	3723	C	ALA	735	109.753	5.301	-12.546	1.00	49.45	B	C
ATOM	3724	O	ALA	735	110.869	5.510	-12.074	1.00	49.60	B	O
ATOM	3725	N	TRP	736	109.211	4.097	-12.620	1.00	51.20	B	N
ATOM	3726	CA	TRP	736	109.909	2.953	-12.092	1.00	53.02	B	C
ATOM	3727	CB	TRP	736	109.317	2.599	-10.730	1.00	56.21	B	C
ATOM	3728	CG	TRP	736	109.572	3.686	-9.727	1.00	60.44	B	C
ATOM	3729	CD2	TRP	736	110.836	4.021	-9.142	1.00	62.33	B	C
ATOM	3730	CE2	TRP	736	110.628	5.151	-8.312	1.00	63.10	B	C
ATOM	3731	CE3	TRP	736	112.126	3.476	-9.240	1.00	62.64	B	C
ATOM	3732	CD1	TRP	736	108.669	4.596	-9.237	1.00	61.74	B	C
ATOM	3733	NE1	TRP	736	109.300	5.482	-8.389	1.00	62.80	B	N
ATOM	3734	CZ2	TRP	736	111.666	5.745	-7.582	1.00	63.88	B	C
ATOM	3735	CZ3	TRP	736	113.154	4.063	-8.517	1.00	63.73	B	C
ATOM	3736	CH2	TRP	736	112.918	5.188	-7.696	1.00	64.50	B	C
ATOM	3737	C	TRP	736	109.908	1.762	-13.025	1.00	52.11	B	C
ATOM	3738	O	TRP	736	110.452	0.709	-12.683	1.00	52.36	B	O
ATOM	3739	N	GLY	737	109.328	1.941	-14.213	1.00	50.69	B	N
ATOM	3740	CA	GLY	737	109.264	0.868	-15.200	1.00	48.68	B	C

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ATOM	3741	C	GLY	737	108.424	-0.338	-14.794	1.00	47.04	B	C
ATOM	3742	O	GLY	737	108.891	-1.477	-14.854	1.00	47.34	B	O
ATOM	3743	N	VAL	738	107.183	-0.094	-14.384	1.00	45.15	B	N
ATOM	3744	CA	VAL	738	106.304	-1.175	-13.974	1.00	43.35	B	C
ATOM	3745	CB	VAL	738	105.538	-0.836	-12.699	1.00	43.45	B	C
ATOM	3746	CG1	VAL	738	105.093	-2.116	-12.034	1.00	42.95	B	C
ATOM	3747	CG2	VAL	738	106.373	0.037	-11.768	1.00	43.30	B	C
ATOM	3748	C	VAL	738	105.268	-1.475	-15.040	1.00	42.92	B	C
ATOM	3749	O	VAL	738	104.379	-0.659	-15.300	1.00	43.94	B	O
ATOM	3750	N	PRO	739	105.352	-2.659	-15.657	1.00	42.06	B	N
ATOM	3751	CD	PRO	739	106.208	-3.793	-15.281	1.00	41.73	B	C
ATOM	3752	CA	PRO	739	104.394	-3.047	-16.698	1.00	41.97	B	C
ATOM	3753	CB	PRO	739	104.759	-4.508	-16.974	1.00	41.97	B	C
ATOM	3754	CG	PRO	739	105.343	-4.972	-15.655	1.00	41.61	B	C
ATOM	3755	C	PRO	739	102.983	-2.907	-16.133	1.00	41.59	B	C
ATOM	3756	O	PRO	739	102.516	-3.721	-15.330	1.00	41.48	B	O
ATOM	3757	N	ILE	740	102.353	-1.810	-16.516	1.00	41.38	B	N
ATOM	3758	CA	ILE	740	101.013	-1.456	-16.081	1.00	42.24	B	C
ATOM	3759	CB	ILE	740	100.413	-0.442	-17.047	1.00	41.55	B	C
ATOM	3760	CG2	ILE	740	99.399	0.425	-16.325	1.00	40.89	B	C
ATOM	3761	CG1	ILE	740	101.526	0.437	-17.611	1.00	41.77	B	C
ATOM	3762	CD1	ILE	740	101.096	1.273	-18.790	1.00	42.98	B	C
ATOM	3763	C	ILE	740	100.038	-2.631	-15.943	1.00	43.18	B	C
ATOM	3764	O	ILE	740	99.275	-2.710	-14.962	1.00	43.16	B	O
ATOM	3765	N	ALA	741	100.073	-3.533	-16.927	1.00	43.85	B	N
ATOM	3766	CA	ALA	741	99.210	-4.713	-16.959	1.00	44.53	B	C
ATOM	3767	CB	ALA	741	99.700	-5.692	-18.019	1.00	44.10	B	C
ATOM	3768	C	ALA	741	99.158	-5.393	-15.597	1.00	45.49	B	C
ATOM	3769	O	ALA	741	98.106	-5.897	-15.173	1.00	45.09	B	O
ATOM	3770	N	ALA	742	100.296	-5.361	-14.906	1.00	45.90	B	N
ATOM	3771	CA	ALA	742	100.417	-5.958	-13.590	1.00	46.51	B	C
ATOM	3772	CB	ALA	742	101.809	-5.693	-13.023	1.00	46.57	B	C
ATOM	3773	C	ALA	742	99.327	-5.453	-12.631	1.00	46.74	B	C
ATOM	3774	O	ALA	742	98.586	-6.257	-12.048	1.00	47.54	B	O
ATOM	3775	N	ILE	743	99.191	-4.133	-12.505	1.00	46.83	B	N
ATOM	3776	CA	ILE	743	98.184	-3.572	-11.603	1.00	47.67	B	C
ATOM	3777	CB	ILE	743	98.636	-2.208	-10.991	1.00	48.12	B	C
ATOM	3778	CG2	ILE	743	97.457	-1.488	-10.340	1.00	48.32	B	C
ATOM	3779	CG1	ILE	743	99.683	-2.434	-9.892	1.00	47.90	B	C
ATOM	3780	CD1	ILE	743	100.953	-3.122	-10.346	1.00	47.99	B	C
ATOM	3781	C	ILE	743	96.808	-3.450	-12.256	1.00	47.71	B	C
ATOM	3782	O	ILE	743	95.783	-3.668	-11.601	1.00	47.63	B	O
ATOM	3783	N	TYR	744	96.784	-3.115	-13.543	1.00	47.47	B	N
ATOM	3784	CA	TYR	744	95.519	-2.987	-14.256	1.00	47.21	B	C
ATOM	3785	CB	TYR	744	95.374	-1.596	-14.868	1.00	47.17	B	C
ATOM	3786	CG	TYR	744	95.267	-0.456	-13.877	1.00	47.45	B	C
ATOM	3787	CD1	TYR	744	94.932	-0.676	-12.542	1.00	47.55	B	C
ATOM	3788	CE1	TYR	744	94.831	0.397	-11.639	1.00	48.04	B	C
ATOM	3789	CD2	TYR	744	95.496	0.859	-14.288	1.00	47.50	B	C
ATOM	3790	CE2	TYR	744	95.397	1.937	-13.401	1.00	47.76	B	C
ATOM	3791	CZ	TYR	744	95.064	1.705	-12.079	1.00	48.40	B	C
ATOM	3792	OH	TYR	744	94.956	2.784	-11.217	1.00	49.34	B	O
ATOM	3793	C	TYR	744	95.329	-4.034	-15.348	1.00	47.23	B	C
ATOM	3794	O	TYR	744	96.172	-4.183	-16.225	1.00	47.38	B	O
ATOM	3795	N	ASN	745	94.223	-4.768	-15.276	1.00	46.93	B	N
ATOM	3796	CA	ASN	745	93.897	-5.779	-16.271	1.00	47.18	B	C
ATOM	3797	CB	ASN	745	92.756	-6.679	-15.778	1.00	47.23	B	C
ATOM	3798	CG	ASN	745	91.396	-6.314	-16.407	1.00	47.04	B	C
ATOM	3799	OD1	ASN	745	90.843	-7.069	-17.223	1.00	46.74	B	O
ATOM	3800	ND2	ASN	745	90.890	-5.135	-16.075	1.00	45.41	B	N
ATOM	3801	C	ASN	745	93.420	-5.040	-17.508	1.00	47.02	B	C
ATOM	3802	O	ASN	745	93.254	-3.823	-17.485	1.00	46.37	B	O

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ATOM	3803	N	LYS	746	93.124	-5.802	-18.554	1.00	47.64	B	N
ATOM	3804	CA	LYS	746	92.631	-5.240	-19.796	1.00	48.29	B	C
ATOM	3805	CB	LYS	746	92.238	-6.343	-20.775	1.00	49.74	B	C
ATOM	3806	CG	LYS	746	91.637	-5.807	-22.071	1.00	51.42	B	C
ATOM	3807	CD	LYS	746	92.644	-4.928	-22.810	1.00	52.46	B	C
ATOM	3808	CE	LYS	746	92.013	-4.176	-23.982	1.00	53.88	B	C
ATOM	3809	NZ	LYS	746	91.144	-5.029	-24.858	1.00	53.82	B	N
ATOM	3810	C	LYS	746	91.424	-4.368	-19.553	1.00	47.41	B	C
ATOM	3811	O	LYS	746	91.471	-3.168	-19.758	1.00	46.87	B	O
ATOM	3812	N	THR	747	90.346	-4.986	-19.098	1.00	47.03	B	N
ATOM	3813	CA	THR	747	89.106	-4.276	-18.849	1.00	47.50	B	C
ATOM	3814	CB	THR	747	88.059	-5.213	-18.218	1.00	48.98	B	C
ATOM	3815	OG1	THR	747	88.645	-5.925	-17.123	1.00	50.28	B	O
ATOM	3816	CG2	THR	747	87.568	-6.221	-19.248	1.00	49.83	B	C
ATOM	3817	C	THR	747	89.246	-2.989	-18.045	1.00	46.40	B	C
ATOM	3818	O	THR	747	88.634	-1.976	-18.389	1.00	45.61	B	O
ATOM	3819	N	GLN	748	90.072	-3.013	-17.004	1.00	46.19	B	N
ATOM	3820	CA	GLN	748	90.267	-1.819	-16.187	1.00	46.40	B	C
ATOM	3821	CB	GLN	748	90.749	-2.165	-14.784	1.00	46.20	B	C
ATOM	3822	CG	GLN	748	92.124	-2.741	-14.724	1.00	46.98	B	C
ATOM	3823	CD	GLN	748	92.219	-3.853	-13.706	1.00	47.53	B	C
ATOM	3824	OE1	GLN	748	91.424	-4.790	-13.729	1.00	47.49	B	O
ATOM	3825	NE2	GLN	748	93.206	-3.773	-12.820	1.00	47.53	B	N
ATOM	3826	C	GLN	748	91.246	-0.891	-16.864	1.00	46.53	B	C
ATOM	3827	O	GLN	748	91.206	0.321	-16.666	1.00	45.83	B	O
ATOM	3828	N	ARG	749	92.138	-1.469	-17.659	1.00	47.64	B	N
ATOM	3829	CA	ARG	749	93.097	-0.662	-18.391	1.00	49.26	B	C
ATOM	3830	CB	ARG	749	94.260	-1.524	-18.915	1.00	51.08	B	C
ATOM	3831	CG	ARG	749	94.119	-2.055	-20.347	1.00	53.30	B	C
ATOM	3832	CD	ARG	749	95.311	-2.925	-20.757	1.00	54.61	B	C
ATOM	3833	NE	ARG	749	95.328	-4.212	-20.061	1.00	55.20	B	N
ATOM	3834	CZ	ARG	749	96.151	-4.522	-19.063	1.00	55.44	B	C
ATOM	3835	NH1	ARG	749	97.040	-3.638	-18.632	1.00	55.26	B	N
ATOM	3836	NH2	ARG	749	96.077	-5.712	-18.482	1.00	55.59	B	N
ATOM	3837	C	ARG	749	92.323	-0.004	-19.536	1.00	48.88	B	C
ATOM	3838	O	ARG	749	92.622	1.120	-19.937	1.00	49.46	B	O
ATOM	3839	N	GLU	750	91.289	-0.700	-20.009	1.00	48.02	B	N
ATOM	3840	CA	GLU	750	90.445	-0.211	-21.093	1.00	47.53	B	C
ATOM	3841	CB	GLU	750	89.393	-1.257	-21.476	1.00	48.27	B	C
ATOM	3842	CG	GLU	750	89.972	-2.510	-22.103	1.00	49.92	B	C
ATOM	3843	CD	GLU	750	88.921	-3.443	-22.706	1.00	51.03	B	C
ATOM	3844	OE1	GLU	750	88.521	-4.417	-22.025	1.00	51.77	B	O
ATOM	3845	OE2	GLU	750	88.520	-3.221	-23.876	1.00	51.15	B	O
ATOM	3846	C	GLU	750	89.752	1.075	-20.681	1.00	46.62	B	C
ATOM	3847	O	GLU	750	89.609	1.999	-21.488	1.00	46.58	B	O
ATOM	3848	N	LYS	751	89.324	1.125	-19.421	1.00	45.96	B	N
ATOM	3849	CA	LYS	751	88.647	2.295	-18.881	1.00	44.70	B	C
ATOM	3850	CB	LYS	751	88.092	1.997	-17.493	1.00	43.82	B	C
ATOM	3851	CG	LYS	751	87.503	3.224	-16.819	1.00	42.95	B	C
ATOM	3852	CD	LYS	751	86.949	2.924	-15.439	1.00	42.10	B	C
ATOM	3853	CE	LYS	751	86.215	4.144	-14.902	1.00	41.97	B	C
ATOM	3854	NZ	LYS	751	85.580	3.903	-13.576	1.00	41.88	B	N
ATOM	3855	C	LYS	751	89.600	3.474	-18.781	1.00	44.52	B	C
ATOM	3856	O	LYS	751	89.197	4.624	-18.969	1.00	44.18	B	O
ATOM	3857	N	PHE	752	90.860	3.175	-18.472	1.00	43.73	B	N
ATOM	3858	CA	PHE	752	91.884	4.200	-18.318	1.00	43.41	B	C
ATOM	3859	CB	PHE	752	92.787	3.867	-17.135	1.00	42.25	B	C
ATOM	3860	CG	PHE	752	92.033	3.579	-15.864	1.00	42.14	B	C
ATOM	3861	CD1	PHE	752	90.870	4.277	-15.553	1.00	41.50	B	C
ATOM	3862	CD2	PHE	752	92.467	2.587	-14.995	1.00	41.55	B	C
ATOM	3863	CE1	PHE	752	90.160	3.989	-14.408	1.00	40.11	B	C
ATOM	3864	CE2	PHE	752	91.760	2.296	-13.849	1.00	40.14	B	C

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ATOM	3865	CZ	PHE	752	90.604	2.997	-13.555	1.00	39.13	B	C
ATOM	3866	C	PHE	752	92.707	4.351	-19.570	1.00	44.12	B	C
ATOM	3867	O	PHE	752	93.803	4.908	-19.548	1.00	44.15	B	O
ATOM	3868	N	ALA	753	92.155	3.862	-20.669	1.00	45.07	B	N
ATOM	3869	CA	ALA	753	92.820	3.942	-21.952	1.00	47.00	B	C
ATOM	3870	CB	ALA	753	92.119	3.044	-22.959	1.00	48.17	B	C
ATOM	3871	C	ALA	753	92.831	5.402	-22.415	1.00	48.22	B	C
ATOM	3872	O	ALA	753	91.969	5.855	-23.175	1.00	49.27	B	O
ATOM	3873	N	TRP	754	93.764	6.146	-21.840	1.00	48.69	B	N
ATOM	3874	CA	TRP	754	93.971	7.563	-22.096	1.00	48.78	B	C
ATOM	3875	CB	TRP	754	92.678	8.374	-21.930	1.00	48.55	B	C
ATOM	3876	CG	TRP	754	91.874	8.030	-20.711	1.00	49.76	B	C
ATOM	3877	CD2	TRP	754	91.813	8.771	-19.488	1.00	50.29	B	C
ATOM	3878	CE2	TRP	754	90.929	8.080	-18.623	1.00	50.38	B	C
ATOM	3879	CE3	TRP	754	92.416	9.954	-19.038	1.00	50.40	B	C
ATOM	3880	CD1	TRP	754	91.044	6.950	-20.545	1.00	50.28	B	C
ATOM	3881	NE1	TRP	754	90.478	6.973	-19.294	1.00	50.62	B	N
ATOM	3882	CZ2	TRP	754	90.633	8.535	-17.333	1.00	50.10	B	C
ATOM	3883	CZ3	TRP	754	92.120	10.407	-17.754	1.00	49.98	B	C
ATOM	3884	CH2	TRP	754	91.236	9.697	-16.917	1.00	50.08	B	C
ATOM	3885	C	TRP	754	94.983	7.938	-21.034	1.00	49.02	B	C
ATOM	3886	O	TRP	754	96.140	8.217	-21.358	1.00	49.29	B	O
ATOM	3887	N	ALA	755	94.570	7.822	-19.767	1.00	48.31	B	N
ATOM	3888	CA	ALA	755	95.425	8.116	-18.619	1.00	47.81	B	C
ATOM	3889	CB	ALA	755	94.815	7.543	-17.357	1.00	46.90	B	C
ATOM	3890	C	ALA	755	96.746	7.439	-18.911	1.00	47.50	B	C
ATOM	3891	O	ALA	755	97.819	8.015	-18.750	1.00	47.22	B	O
ATOM	3892	N	ILE	756	96.639	6.220	-19.411	1.00	47.79	B	N
ATOM	3893	CA	ILE	756	97.806	5.464	-19.790	1.00	49.67	B	C
ATOM	3894	CB	ILE	756	97.404	4.073	-20.343	1.00	49.89	B	C
ATOM	3895	CG2	ILE	756	97.049	3.149	-19.191	1.00	49.17	B	C
ATOM	3896	CG1	ILE	756	96.213	4.194	-21.305	1.00	50.19	B	C
ATOM	3897	CD1	ILE	756	95.846	2.906	-22.008	1.00	49.76	B	C
ATOM	3898	C	ILE	756	98.517	6.296	-20.856	1.00	50.53	B	C
ATOM	3899	O	ILE	756	99.410	7.085	-20.534	1.00	51.12	B	O
ATOM	3900	N	ASP	757	98.036	6.191	-22.093	1.00	51.49	B	N
ATOM	3901	CA	ASP	757	98.583	6.907	-23.231	1.00	52.93	B	C
ATOM	3902	CB	ASP	757	97.529	6.982	-24.338	1.00	54.17	B	C
ATOM	3903	CG	ASP	757	97.800	8.102	-25.336	1.00	55.59	B	C
ATOM	3904	OD1	ASP	757	97.071	9.118	-25.291	1.00	56.17	B	O
ATOM	3905	OD2	ASP	757	98.742	7.973	-26.156	1.00	55.94	B	O
ATOM	3906	C	ASP	757	99.039	8.306	-22.849	1.00	53.12	B	C
ATOM	3907	O	ASP	757	100.216	8.643	-22.979	1.00	53.06	B	O
ATOM	3908	N	MET	758	98.112	9.099	-22.333	1.00	53.42	B	N
ATOM	3909	CA	MET	758	98.428	10.459	-21.941	1.00	54.29	B	C
ATOM	3910	CB	MET	758	97.228	11.376	-22.186	1.00	54.72	B	C
ATOM	3911	CG	MET	758	95.984	11.010	-21.418	1.00	55.04	B	C
ATOM	3912	SD	MET	758	94.764	12.312	-21.482	1.00	58.09	B	S
ATOM	3913	CE	MET	758	95.396	13.457	-20.227	1.00	56.77	B	C
ATOM	3914	C	MET	758	98.931	10.591	-20.505	1.00	54.59	B	C
ATOM	3915	O	MET	758	98.170	10.897	-19.589	1.00	55.26	B	O
ATOM	3916	N	ALA	759	100.224	10.347	-20.322	1.00	54.97	B	N
ATOM	3917	CA	ALA	759	100.876	10.449	-19.016	1.00	55.49	B	C
ATOM	3918	CB	ALA	759	100.214	9.521	-17.992	1.00	55.05	B	C
ATOM	3919	C	ALA	759	102.364	10.120	-19.131	1.00	56.02	B	C
ATOM	3920	O	ALA	759	102.783	9.349	-20.012	1.00	57.03	B	O
ATOM	3921	N	ALA	760	103.152	10.748	-18.258	1.00	55.22	B	N
ATOM	3922	CA	ALA	760	104.599	10.550	-18.188	1.00	54.12	B	C
ATOM	3923	CB	ALA	760	105.334	11.726	-18.830	1.00	54.20	B	C
ATOM	3924	C	ALA	760	104.932	10.471	-16.706	1.00	53.52	B	C
ATOM	3925	O	ALA	760	104.324	11.171	-15.901	1.00	53.70	B	O
ATOM	3926	N	GLU	761	105.848	9.582	-16.342	1.00	52.32	B	N

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ATOM	3927	CA	GLU	761	106.285	9.421	-14.958	1.00	51.59	B	C
ATOM	3928	CB	GLU	761	107.616	8.676	-14.914	1.00	53.44	B	C
ATOM	3929	CG	GLU	761	108.751	9.288	-15.721	1.00	56.73	B	C
ATOM	3930	CD	GLU	761	108.413	9.427	-17.201	1.00	58.83	B	C
ATOM	3931	OE1	GLU	761	107.903	8.449	-17.801	1.00	59.73	B	O
ATOM	3932	OE2	GLU	761	108.626	10.531	-17.754	1.00	59.82	B	O
ATOM	3933	C	GLU	761	106.433	10.753	-14.237	1.00	50.42	B	C
ATOM	3934	O	GLU	761	106.442	10.808	-13.006	1.00	50.35	B	O
ATOM	3935	N	ALA	762	106.580	11.815	-15.028	1.00	48.98	B	N
ATOM	3936	CA	ALA	762	106.709	13.178	-14.536	1.00	47.51	B	C
ATOM	3937	CB	ALA	762	107.474	14.023	-15.553	1.00	47.22	B	C
ATOM	3938	C	ALA	762	105.326	13.790	-14.269	1.00	46.43	B	C
ATOM	3939	O	ALA	762	105.163	15.014	-14.308	1.00	47.20	B	O
ATOM	3940	N	TYR	763	104.331	12.942	-14.003	1.00	44.13	B	N
ATOM	3941	CA	TYR	763	102.983	13.421	-13.726	1.00	41.88	B	C
ATOM	3942	CB	TYR	763	101.919	12.452	-14.258	1.00	40.01	B	C
ATOM	3943	CG	TYR	763	100.523	12.794	-13.770	1.00	37.73	B	C
ATOM	3944	CD1	TYR	763	99.772	13.791	-14.389	1.00	36.55	B	C
ATOM	3945	CE1	TYR	763	98.536	14.172	-13.891	1.00	35.75	B	C
ATOM	3946	CD2	TYR	763	99.991	12.177	-12.638	1.00	37.74	B	C
ATOM	3947	CE2	TYR	763	98.756	12.555	-12.129	1.00	37.25	B	C
ATOM	3948	CZ	TYR	763	98.033	13.557	-12.758	1.00	36.47	B	C
ATOM	3949	OH	TYR	763	96.824	13.958	-12.234	1.00	35.34	B	O
ATOM	3950	C	TYR	763	102.743	13.631	-12.246	1.00	41.24	B	C
ATOM	3951	O	TYR	763	102.988	12.742	-11.437	1.00	41.38	B	O
ATOM	3952	N	ALA	764	102.178	14.781	-11.910	1.00	40.97	B	N
ATOM	3953	CA	ALA	764	101.870	15.087	-10.529	1.00	41.08	B	C
ATOM	3954	CB	ALA	764	102.837	16.130	-9.991	1.00	41.09	B	C
ATOM	3955	C	ALA	764	100.435	15.580	-10.409	1.00	41.16	B	C
ATOM	3956	O	ALA	764	100.095	16.668	-10.879	1.00	41.16	B	O
ATOM	3957	N	PHE	765	99.580	14.753	-9.819	1.00	41.71	B	N
ATOM	3958	CA	PHE	765	98.184	15.130	-9.617	1.00	42.39	B	C
ATOM	3959	CB	PHE	765	97.404	13.981	-8.968	1.00	42.35	B	C
ATOM	3960	CG	PHE	765	96.105	14.409	-8.332	1.00	43.08	B	C
ATOM	3961	CD1	PHE	765	94.967	14.607	-9.100	1.00	43.54	B	C
ATOM	3962	CD2	PHE	765	96.025	14.632	-6.959	1.00	43.34	B	C
ATOM	3963	CE1	PHE	765	93.761	15.028	-8.506	1.00	43.76	B	C
ATOM	3964	CE2	PHE	765	94.826	15.052	-6.358	1.00	43.32	B	C
ATOM	3965	CZ	PHE	765	93.696	15.250	-7.134	1.00	43.27	B	C
ATOM	3966	C	PHE	765	98.100	16.384	-8.741	1.00	42.64	B	C
ATOM	3967	O	PHE	765	97.269	17.259	-9.065	1.00	43.29	B	O
ATOM	3968	OXT	PHE	765	98.862	16.478	-7.748	1.00	42.21	B	O
TER	3969	PHE	765							B	
ATOM	3970	O5'	ADE	1	62.744	31.351	-2.186	1.00	65.37	ADNA	O
ATOM	3971	N9	ADE	1	61.828	28.842	-3.497	1.00	55.97	ADNA	N
ATOM	3972	C4	ADE	1	61.079	28.563	-4.607	1.00	55.52	ADNA	N
ATOM	3973	N3	ADE	1	59.838	28.046	-4.636	1.00	55.02	ADNA	N
ATOM	3974	C2	ADE	1	59.415	27.928	-5.892	1.00	55.08	ADNA	C
ATOM	3975	N1	ADE	1	60.047	28.247	-7.034	1.00	54.75	ADNA	N
ATOM	3976	C6	ADE	1	61.294	28.767	-6.962	1.00	54.76	ADNA	C
ATOM	3977	N6	ADE	1	61.921	29.090	-8.093	1.00	54.75	ADNA	N
ATOM	3978	C5	ADE	1	61.857	28.939	-5.688	1.00	55.36	ADNA	C
ATOM	3979	N7	ADE	1	63.087	29.431	-5.264	1.00	54.92	ADNA	N
ATOM	3980	C8	ADE	1	63.022	29.346	-3.959	1.00	54.98	ADNA	C
ATOM	3981	C2'	ADE	1	62.543	28.654	-1.136	1.00	60.43	ADNA	C
ATOM	3982	C5'	ADE	1	61.811	31.693	-1.153	1.00	63.71	ADNA	C
ATOM	3983	C4'	ADE	1	61.088	30.460	-0.664	1.00	62.44	ADNA	C
ATOM	3984	O4'	ADE	1	60.564	29.763	-1.811	1.00	59.71	ADNA	O
ATOM	3985	C1'	ADE	1	61.390	28.655	-2.127	1.00	58.07	ADNA	C
ATOM	3986	C3'	ADE	1	61.994	29.451	0.028	1.00	61.83	ADNA	C
ATOM	3987	O3'	ADE	1	61.212	28.662	0.944	1.00	63.60	ADNA	O
ATOM	3988	P	ADE	2	61.106	27.064	0.754	1.00	64.80	ADNA	P

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ATOM	3989	O1P	ADE	2	60.190	26.558	1.816	1.00	65.41	ADNA	O
ATOM	3990	O2P	ADE	2	62.480	26.498	0.642	1.00	64.92	ADNA	O
ATOM	3991	O5'	ADE	2	60.386	26.895	-0.664	1.00	63.83	ADNA	O
ATOM	3992	N9	ADE	2	61.037	24.950	-3.889	1.00	54.63	ADNA	N
ATOM	3993	C4	ADE	2	60.933	24.908	-5.253	1.00	53.62	ADNA	C
ATOM	3994	N3	ADE	2	59.928	24.377	-5.973	1.00	53.62	ADNA	N
ATOM	3995	C2	ADE	2	60.175	24.492	-7.274	1.00	54.14	ADNA	C
ATOM	3996	N1	ADE	2	61.233	25.037	-7.891	1.00	53.65	ADNA	N
ATOM	3997	C6	ADE	2	62.222	25.564	-7.135	1.00	53.73	ADNA	C
ATOM	3998	N6	ADE	2	63.274	26.104	-7.750	1.00	54.05	ADNA	N
ATOM	3999	C5	ADE	2	62.078	25.507	-5.736	1.00	53.46	ADNA	C
ATOM	4000	N7	ADE	2	62.883	25.941	-4.690	1.00	52.93	ADNA	N
ATOM	4001	C8	ADE	2	62.220	25.591	-3.619	1.00	53.17	ADNA	C
ATOM	4002	C2'	ADE	2	60.619	24.065	-1.593	1.00	58.83	ADNA	C
ATOM	4003	C5'	ADE	2	58.969	26.734	-0.768	1.00	62.00	ADNA	C
ATOM	4004	C4'	ADE	2	58.646	25.386	-1.375	1.00	60.79	ADNA	C
ATOM	4005	O4'	ADE	2	59.039	25.361	-2.767	1.00	59.41	ADNA	O
ATOM	4006	C1'	ADE	2	60.058	24.388	-2.964	1.00	57.39	ADNA	C
ATOM	4007	C3'	ADE	2	59.392	24.223	-0.719	1.00	59.67	ADNA	C
ATOM	4008	O3'	ADE	2	58.594	23.046	-0.788	1.00	60.75	ADNA	O
ATOM	4009	P	ADE	3	59.071	21.715	-0.028	1.00	61.71	ADNA	P
ATOM	4010	O1P	ADE	3	58.621	21.775	1.391	1.00	62.24	ADNA	O
ATOM	4011	O2P	ADE	3	60.513	21.508	-0.343	1.00	61.74	ADNA	O
ATOM	4012	O5'	ADE	3	58.215	20.578	-0.728	1.00	59.62	ADNA	O
ATOM	4013	N9	ADE	3	59.726	20.819	-4.792	1.00	50.20	ADNA	N
ATOM	4014	C4	ADE	3	60.158	20.954	-6.090	1.00	49.82	ADNA	C
ATOM	4015	N3	ADE	3	59.561	20.491	-7.199	1.00	50.11	ADNA	N
ATOM	4016	C2	ADE	3	60.263	20.822	-8.286	1.00	50.16	ADNA	C
ATOM	4017	N1	ADE	3	61.407	21.510	-8.382	1.00	48.99	ADNA	N
ATOM	4018	C6	ADE	3	61.981	21.963	-7.248	1.00	49.22	ADNA	C
ATOM	4019	N6	ADE	3	63.118	22.653	-7.346	1.00	49.25	ADNA	N
ATOM	4020	C5	ADE	3	61.336	21.676	-6.025	1.00	49.45	ADNA	C
ATOM	4021	N7	ADE	3	61.647	21.986	-4.708	1.00	49.78	ADNA	N
ATOM	4022	C8	ADE	3	60.664	21.455	-4.018	1.00	50.30	ADNA	C
ATOM	4023	C2'	ADE	3	58.717	18.959	-3.441	1.00	53.08	ADNA	C
ATOM	4024	C5'	ADE	3	56.958	20.887	-1.308	1.00	56.26	ADNA	C
ATOM	4025	C4'	ADE	3	56.879	20.303	-2.696	1.00	54.78	ADNA	C
ATOM	4026	O4'	ADE	3	57.714	21.047	-3.623	1.00	52.22	ADNA	O
ATOM	4027	C1'	ADE	3	58.504	20.135	-4.367	1.00	51.51	ADNA	C
ATOM	4028	C3'	ADE	3	57.361	18.857	-2.758	1.00	54.23	ADNA	C
ATOM	4029	O3'	ADE	3	56.445	18.072	-3.522	1.00	55.44	ADNA	O
ATOM	4030	P	ADE	4	56.962	16.734	-4.241	1.00	57.32	ADNA	P
ATOM	4031	O1P	ADE	4	55.758	15.922	-4.577	1.00	58.06	ADNA	O
ATOM	4032	O2P	ADE	4	58.049	16.134	-3.413	1.00	58.14	ADNA	O
ATOM	4033	O5'	ADE	4	57.624	17.282	-5.584	1.00	55.23	ADNA	O
ATOM	4034	N9	ADE	4	60.631	17.698	-8.048	1.00	44.90	ADNA	N
ATOM	4035	C4	ADE	4	61.738	18.133	-8.731	1.00	44.40	ADNA	C
ATOM	4036	N3	ADE	4	61.893	18.209	-10.060	1.00	45.60	ADNA	N
ATOM	4037	C2	ADE	4	63.102	18.668	-10.364	1.00	45.56	ADNA	C
ATOM	4038	N1	ADE	4	64.098	19.029	-9.556	1.00	45.27	ADNA	N
ATOM	4039	C6	ADE	4	63.910	18.943	-8.226	1.00	44.94	ADNA	C
ATOM	4040	N6	ADE	4	64.911	19.299	-7.424	1.00	46.30	ADNA	N
ATOM	4041	C5	ADE	4	62.665	18.479	-7.770	1.00	44.03	ADNA	C
ATOM	4042	N7	ADE	4	62.146	18.289	-6.497	1.00	43.24	ADNA	N
ATOM	4043	C8	ADE	4	60.939	17.827	-6.716	1.00	44.10	ADNA	C
ATOM	4044	C2'	ADE	4	58.912	15.894	-8.030	1.00	45.19	ADNA	C
ATOM	4045	C5'	ADE	4	56.840	17.995	-6.533	1.00	51.02	ADNA	C
ATOM	4046	C4'	ADE	4	57.170	17.527	-7.928	1.00	48.00	ADNA	C
ATOM	4047	O4'	ADE	4	58.386	18.162	-8.375	1.00	46.58	ADNA	O
ATOM	4048	C1'	ADE	4	59.391	17.198	-8.641	1.00	45.08	ADNA	C
ATOM	4049	C3'	ADE	4	57.399	16.023	-8.056	1.00	45.41	ADNA	C
ATOM	4050	O3'	ADE	4	56.842	15.562	-9.287	1.00	45.59	ADNA	O



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ATOM	4051	P	ADE	5	57.426	14.238	-9.990	1.00	46.42	ADNA	P
ATOM	4052	O1P	ADE	5	56.384	13.776	-10.959	1.00	44.92	ADNA	O
ATOM	4053	O2P	ADE	5	57.943	13.302	-8.945	1.00	45.66	ADNA	O
ATOM	4054	O5'	ADE	5	58.668	14.778	-10.830	1.00	42.90	ADNA	O
ATOM	4055	N9	ADE	5	62.552	15.458	-10.924	1.00	30.34	ADNA	N
ATOM	4056	C4	ADE	5	63.844	15.879	-10.704	1.00	28.83	ADNA	C
ATOM	4057	N3	ADE	5	64.745	16.269	-11.621	1.00	30.05	ADNA	N
ATOM	4058	C2	ADE	5	65.898	16.606	-11.039	1.00	29.98	ADNA	C
ATOM	4059	N1	ADE	5	66.225	16.599	-9.749	1.00	28.46	ADNA	N
ATOM	4060	C6	ADE	5	65.296	16.211	-8.855	1.00	28.22	ADNA	C
ATOM	4061	N6	ADE	5	65.625	16.210	-7.567	1.00	28.42	ADNA	N
ATOM	4062	C5	ADE	5	64.031	15.829	-9.340	1.00	27.79	ADNA	C
ATOM	4063	N7	ADE	5	62.881	15.387	-8.706	1.00	28.08	ADNA	N
ATOM	4064	C8	ADE	5	62.037	15.175	-9.685	1.00	28.96	ADNA	C
ATOM	4065	C2'	ADE	5	61.270	14.011	-12.574	1.00	32.04	ADNA	C
ATOM	4066	C5'	ADE	5	58.457	15.717	-11.874	1.00	38.45	ADNA	C
ATOM	4067	C4'	ADE	5	59.625	15.725	-12.831	1.00	35.52	ADNA	C
ATOM	4068	O4'	ADE	5	60.793	16.287	-12.193	1.00	34.62	ADNA	O
ATOM	4069	C1'	ADE	5	61.875	15.366	-12.222	1.00	32.41	ADNA	C
ATOM	4070	C3'	ADE	5	60.059	14.386	-13.420	1.00	33.06	ADNA	C
ATOM	4071	O3'	ADE	5	60.382	14.626	-14.800	1.00	31.61	ADNA	O
ATOM	4072	P	GUA	6	60.842	13.415	-15.762	1.00	31.62	ADNA	P
ATOM	4073	O1P	GUA	6	60.646	12.117	-15.056	1.00	32.62	ADNA	O
ATOM	4074	O2P	GUA	6	60.234	13.609	-17.109	1.00	33.14	ADNA	O
ATOM	4075	O5'	GUA	6	62.400	13.689	-15.896	1.00	28.49	ADNA	O
ATOM	4076	N9	GUA	6	66.352	13.885	-12.322	1.00	18.23	ADNA	N
ATOM	4077	C4	GUA	6	67.443	14.087	-11.519	1.00	17.56	ADNA	C
ATOM	4078	N3	GUA	6	68.644	14.506	-11.935	1.00	17.95	ADNA	N
ATOM	4079	C2	GUA	6	69.511	14.567	-10.958	1.00	18.12	ADNA	C
ATOM	4080	N2	GUA	6	70.776	14.909	-11.237	1.00	19.52	ADNA	N
ATOM	4081	N1	GUA	6	69.214	14.281	-9.652	1.00	17.75	ADNA	N
ATOM	4082	C6	GUA	6	67.974	13.858	-9.192	1.00	17.59	ADNA	C
ATOM	4083	O6	GUA	6	67.813	13.614	-7.990	1.00	17.11	ADNA	O
ATOM	4084	C5	GUA	6	67.038	13.759	-10.250	1.00	17.52	ADNA	C
ATOM	4085	N7	GUA	6	65.709	13.355	-10.248	1.00	18.05	ADNA	N
ATOM	4086	C8	GUA	6	65.344	13.442	-11.500	1.00	18.06	ADNA	C
ATOM	4087	C2'	GUA	6	66.081	12.904	-14.635	1.00	19.46	ADNA	C
ATOM	4088	C5'	GUA	6	63.119	14.159	-14.776	1.00	24.26	ADNA	C
ATOM	4089	C4'	GUA	6	64.496	14.594	-15.196	1.00	21.45	ADNA	C
ATOM	4090	O4'	GUA	6	65.213	15.002	-14.010	1.00	20.39	ADNA	O
ATOM	4091	C1'	GUA	6	66.300	14.125	-13.761	1.00	19.03	ADNA	C
ATOM	4092	C3'	GUA	6	65.319	13.476	-15.819	1.00	20.94	ADNA	C
ATOM	4093	O3'	GUA	6	66.183	14.055	-16.791	1.00	22.30	ADNA	O
ATOM	4094	P	ADE	7	66.935	13.119	-17.854	1.00	26.11	ADNA	P
ATOM	4095	O1P	ADE	7	66.919	13.861	-19.153	1.00	26.11	ADNA	O
ATOM	4096	O2P	ADE	7	66.406	11.724	-17.787	1.00	25.62	ADNA	O
ATOM	4097	O5'	ADE	7	68.430	13.078	-17.323	1.00	24.38	ADNA	O
ATOM	4098	N9	ADE	7	70.169	12.050	-13.608	1.00	20.04	ADNA	N
ATOM	4099	C4	ADE	7	70.731	11.948	-12.362	1.00	19.85	ADNA	C
ATOM	4100	N3	ADE	7	72.005	12.205	-12.021	1.00	20.85	ADNA	N
ATOM	4101	C2	ADE	7	72.183	12.018	-10.708	1.00	21.10	ADNA	C
ATOM	4102	N1	ADE	7	71.299	11.638	-9.779	1.00	19.03	ADNA	N
ATOM	4103	C6	ADE	7	70.030	11.390	-10.165	1.00	18.73	ADNA	C
ATOM	4104	N6	ADE	7	69.146	11.014	-9.246	1.00	19.40	ADNA	N
ATOM	4105	C5	ADE	7	69.713	11.545	-11.521	1.00	18.87	ADNA	C
ATOM	4106	N7	ADE	7	68.535	11.364	-12.228	1.00	18.24	ADNA	N
ATOM	4107	C8	ADE	7	68.861	11.665	-13.460	1.00	19.43	ADNA	C
ATOM	4108	C2'	ADE	7	70.840	11.659	-16.051	1.00	22.63	ADNA	C
ATOM	4109	C5'	ADE	7	69.216	14.250	-17.306	1.00	22.82	ADNA	C
ATOM	4110	C4'	ADE	7	70.522	13.958	-16.618	1.00	22.98	ADNA	C
ATOM	4111	O4'	ADE	7	70.284	13.760	-15.202	1.00	23.55	ADNA	O
ATOM	4112	C1'	ADE	7	70.874	12.526	-14.803	1.00	22.24	ADNA	C

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ATOM	4113	C3'	ADE	7	71.220	12.685	-17.106	1.00	23.27	ADNA C
ATOM	4114	O3'	ADE	7	72.628	12.902	-17.049	1.00	25.40	ADNA O
ATOM	4115	P	CYT	8	73.560	12.446	-18.266	1.00	27.60	ADNA P
ATOM	4116	O1P	CYT	8	74.055	13.687	-18.924	1.00	26.17	ADNA O
ATOM	4117	O2P	CYT	8	72.811	11.442	-19.059	1.00	28.35	ADNA O
ATOM	4118	O5'	CYT	8	74.774	11.717	-17.529	1.00	29.40	ADNA O
ATOM	4119	N1	CYT	8	73.946	9.707	-13.232	1.00	29.01	ADNA N
ATOM	4120	C6	CYT	8	72.813	9.291	-13.852	1.00	28.72	ADNA C
ATOM	4121	C2	CYT	8	74.037	9.693	-11.854	1.00	27.46	ADNA C
ATOM	4122	O2	CYT	8	75.050	10.152	-11.325	1.00	27.51	ADNA O
ATOM	4123	N3	CYT	8	73.036	9.186	-11.129	1.00	26.27	ADNA N
ATOM	4124	C4	CYT	8	71.953	8.734	-11.734	1.00	27.05	ADNA C
ATOM	4125	N4	CYT	8	71.000	8.209	-10.976	1.00	27.30	ADNA N
ATOM	4126	C5	CYT	8	71.797	8.797	-13.145	1.00	27.98	ADNA C
ATOM	4127	C2'	CYT	8	75.547	9.350	-15.173	1.00	32.44	ADNA C
ATOM	4128	C5'	CYT	8	75.631	12.459	-16.657	1.00	32.20	ADNA C
ATOM	4129	C4'	CYT	8	76.005	11.660	-15.421	1.00	33.16	ADNA C
ATOM	4130	O4'	CYT	8	74.904	11.450	-14.489	1.00	30.83	ADNA O
ATOM	4131	C1'	CYT	8	75.115	10.153	-13.979	1.00	30.69	ADNA C
ATOM	4132	C3'	CYT	8	76.653	10.279	-15.613	1.00	34.63	ADNA C
ATOM	4133	O3'	CYT	8	77.697	10.156	-14.634	1.00	38.89	ADNA O
ATOM	4134	P	URI	9	78.573	8.799	-14.528	1.00	42.19	ADNA P
ATOM	4135	O1P	URI	9	79.629	8.879	-15.583	1.00	40.25	ADNA O
ATOM	4136	O2P	URI	9	77.710	7.589	-14.439	1.00	40.72	ADNA O
ATOM	4137	O5'	URI	9	79.292	8.939	-13.110	1.00	40.08	ADNA O
ATOM	4138	N1	URI	9	76.933	7.615	-10.485	1.00	30.86	ADNA N
ATOM	4139	C6	URI	9	76.704	7.423	-11.813	1.00	30.81	ADNA C
ATOM	4140	C2	URI	9	76.072	7.126	-9.535	1.00	30.67	ADNA C
ATOM	4141	O2	URI	9	76.262	7.253	-8.341	1.00	29.01	ADNA O
ATOM	4142	N3	URI	9	74.976	6.487	-10.032	1.00	30.54	ADNA N
ATOM	4143	C4	URI	9	74.672	6.296	-11.346	1.00	30.86	ADNA C
ATOM	4144	O4	URI	9	73.650	5.693	-11.642	1.00	28.40	ADNA O
ATOM	4145	C5	URI	9	75.622	6.814	-12.259	1.00	31.61	ADNA C
ATOM	4146	I5	URI	9	75.220	6.781	-14.200	1.00	41.18	ADNA I
ATOM	4147	C2'	URI	9	79.450	7.804	-10.314	1.00	33.92	ADNA C
ATOM	4148	C5'	URI	9	79.455	10.222	-12.499	1.00	36.74	ADNA C
ATOM	4149	C4'	URI	9	79.359	10.092	-10.998	1.00	34.67	ADNA C
ATOM	4150	O4'	URI	9	78.028	9.650	-10.657	1.00	33.93	ADNA O
ATOM	4151	C1'	URI	9	78.082	8.388	-10.010	1.00	32.96	ADNA C
ATOM	4152	C3'	URI	9	80.308	9.056	-10.394	1.00	34.42	ADNA C
ATOM	4153	O3'	URI	9	80.744	9.505	-9.096	1.00	33.40	ADNA O
ATOM	4154	P	URI	10	82.045	8.848	-8.420	1.00	33.25	ADNA P
ATOM	4155	O1P	URI	10	82.633	9.840	-7.486	1.00	32.00	ADNA O
ATOM	4156	O2P	URI	10	82.889	8.251	-9.491	1.00	33.04	ADNA O
ATOM	4157	O5'	URI	10	81.434	7.684	-7.522	1.00	32.69	ADNA O
ATOM	4158	N1	URI	10	78.602	4.397	-7.760	1.00	33.85	ADNA N
ATOM	4159	C6	URI	10	78.999	4.688	-9.036	1.00	35.96	ADNA C
ATOM	4160	C2	URI	10	77.429	3.697	-7.536	1.00	34.21	ADNA C
ATOM	4161	O2	URI	10	77.047	3.387	-6.429	1.00	34.24	ADNA O
ATOM	4162	N3	URI	10	76.718	3.370	-8.654	1.00	35.01	ADNA N
ATOM	4163	C4	URI	10	77.047	3.649	-9.944	1.00	36.66	ADNA C
ATOM	4164	O4	URI	10	76.261	3.358	-10.847	1.00	35.29	ADNA O
ATOM	4165	C5	URI	10	78.275	4.342	-10.103	1.00	37.30	ADNA C
ATOM	4166	I5	URI	10	78.941	4.701	-11.932	1.00	47.86	ADNA I
ATOM	4167	C2'	URI	10	80.873	4.637	-6.560	1.00	34.10	ADNA C
ATOM	4168	C5'	URI	10	80.763	8.007	-6.310	1.00	32.66	ADNA C
ATOM	4169	C4'	URI	10	80.267	6.757	-5.628	1.00	33.33	ADNA C
ATOM	4170	O4'	URI	10	79.165	6.207	-6.388	1.00	33.62	ADNA O
ATOM	4171	C1'	URI	10	79.364	4.819	-6.567	1.00	33.84	ADNA C
ATOM	4172	C3'	URI	10	81.308	5.643	-5.500	1.00	33.96	ADNA C
TER	4173		URI	10						ADNA
ATOM	4174	S5'	THY	11	83.518	3.220	-3.592	1.00	46.84	CDNA S

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ATOM	4175	N1	THY	11	78.949	0.541	-5.744	1.00	43.91	CDNA N
ATOM	4176	C6	THY	11	79.745	1.060	-6.744	1.00	43.46	CDNA C
ATOM	4177	C2	THY	11	77.718	-0.007	-6.019	1.00	43.62	CDNA C
ATOM	4178	O2	THY	11	76.989	-0.481	-5.162	1.00	42.23	CDNA O
ATOM	4179	N3	THY	11	77.372	0.017	-7.346	1.00	43.75	CDNA N
ATOM	4180	C4	THY	11	78.119	0.527	-8.394	1.00	44.16	CDNA C
ATOM	4181	O4	THY	11	77.679	0.489	-9.533	1.00	45.27	CDNA O
ATOM	4182	C5	THY	11	79.396	1.080	-8.031	1.00	43.84	CDNA C
ATOM	4183	C5A	THY	11	80.268	1.651	-9.103	1.00	44.47	CDNA C
ATOM	4184	C2'	THY	11	80.467	-0.498	-4.079	1.00	46.59	CDNA C
ATOM	4185	C5'	THY	11	82.433	2.049	-4.396	1.00	45.96	CDNA C
ATOM	4186	C4'	THY	11	81.320	1.642	-3.458	1.00	46.31	CDNA C
ATOM	4187	O4'	THY	11	80.045	1.823	-4.122	1.00	46.01	CDNA O
ATOM	4188	C1'	THY	11	79.414	0.564	-4.347	1.00	45.09	CDNA C
ATOM	4189	C3'	THY	11	81.374	0.169	-3.065	1.00	46.39	CDNA C
ATOM	4190	O3'	THY	11	80.853	-0.035	-1.751	1.00	46.26	CDNA O
ATOM	4191	P	GUA	12	80.858	-1.513	-1.134	1.00	45.69	CDNA P
ATOM	4192	O1P	GUA	12	80.980	-1.395	0.352	1.00	45.27	CDNA O
ATOM	4193	O2P	GUA	12	81.882	-2.261	-1.915	1.00	45.09	CDNA O
ATOM	4194	O5'	GUA	12	79.425	-2.103	-1.498	1.00	44.59	CDNA O
ATOM	4195	N9	GUA	12	77.950	-3.883	-4.058	1.00	37.58	CDNA N
ATOM	4196	C4	GUA	12	77.421	-4.026	-5.319	1.00	35.59	CDNA C
ATOM	4197	N3	GUA	12	76.178	-4.459	-5.614	1.00	34.99	CDNA N
ATOM	4198	C2	GUA	12	75.962	-4.476	-6.921	1.00	34.31	CDNA C
ATOM	4199	N2	GUA	12	74.779	-4.889	-7.398	1.00	34.83	CDNA N
ATOM	4200	N1	GUA	12	76.890	-4.087	-7.856	1.00	32.85	CDNA N
ATOM	4201	C6	GUA	12	78.166	-3.623	-7.566	1.00	32.83	CDNA C
ATOM	4202	O6	GUA	12	78.909	-3.262	-8.477	1.00	31.54	CDNA O
ATOM	4203	C5	GUA	12	78.417	-3.623	-6.180	1.00	34.09	CDNA C
ATOM	4204	N7	GUA	12	79.555	-3.258	-5.478	1.00	35.48	CDNA N
ATOM	4205	C8	GUA	12	79.234	-3.431	-4.225	1.00	36.95	CDNA C
ATOM	4206	C2'	GUA	12	78.203	-4.704	-1.728	1.00	43.59	CDNA C
ATOM	4207	C5'	GUA	12	78.255	-1.672	-0.796	1.00	44.75	CDNA C
ATOM	4208	C4'	GUA	12	77.177	-2.723	-0.903	1.00	44.29	CDNA C
ATOM	4209	O4'	GUA	12	76.819	-2.882	-2.294	1.00	42.50	CDNA O
ATOM	4210	C1'	GUA	12	77.276	-4.137	-2.789	1.00	40.87	CDNA C
ATOM	4211	C3'	GUA	12	77.652	-4.097	-0.452	1.00	45.01	CDNA C
ATOM	4212	O3'	GUA	12	76.550	-4.861	0.036	1.00	47.99	CDNA O
ATOM	4213	P	ADE	13	76.803	-6.350	0.593	1.00	51.54	CDNA P
ATOM	4214	O1P	ADE	13	76.167	-6.408	1.943	1.00	50.71	CDNA O
ATOM	4215	O2P	ADE	13	78.245	-6.732	0.427	1.00	49.54	CDNA O
ATOM	4216	O5'	ADE	13	75.975	-7.276	-0.397	1.00	49.63	CDNA O
ATOM	4217	N9	ADE	13	76.695	-8.351	-4.037	1.00	44.95	CDNA N
ATOM	4218	C4	ADE	13	76.915	-8.260	-5.393	1.00	43.82	CDNA C
ATOM	4219	N3	ADE	13	76.072	-8.606	-6.381	1.00	42.99	CDNA N
ATOM	4220	C2	ADE	13	76.607	-8.339	-7.573	1.00	42.66	CDNA C
ATOM	4221	N1	ADE	13	77.796	-7.803	-7.867	1.00	42.61	CDNA N
ATOM	4222	C6	ADE	13	78.618	-7.462	-6.850	1.00	43.16	CDNA C
ATOM	4223	N6	ADE	13	79.796	-6.910	-7.143	1.00	44.07	CDNA N
ATOM	4224	C5	ADE	13	78.173	-7.704	-5.536	1.00	43.47	CDNA C
ATOM	4225	N7	ADE	13	78.756	-7.482	-4.295	1.00	43.67	CDNA N
ATOM	4226	C8	ADE	13	77.845	-7.892	-3.440	1.00	44.70	CDNA C
ATOM	4227	C2'	ADE	13	75.609	-9.768	-2.243	1.00	46.73	CDNA C
ATOM	4228	C5'	ADE	13	74.582	-7.104	-0.551	1.00	47.82	CDNA C
ATOM	4229	C4'	ADE	13	74.093	-8.001	-1.657	1.00	47.65	CDNA C
ATOM	4230	O4'	ADE	13	74.814	-7.653	-2.866	1.00	46.51	CDNA O
ATOM	4231	C1'	ADE	13	75.457	-8.801	-3.402	1.00	45.80	CDNA C
ATOM	4232	C3'	ADE	13	74.355	-9.490	-1.424	1.00	47.45	CDNA C
ATOM	4233	O3'	ADE	13	73.217	-10.240	-1.880	1.00	47.83	CDNA O
ATOM	4234	P	ADE	14	73.308	-11.838	-2.013	1.00	47.49	CDNA P
ATOM	4235	O1P	ADE	14	71.902	-12.338	-2.029	1.00	46.54	CDNA O
ATOM	4236	O2P	ADE	14	74.265	-12.338	-0.985	1.00	47.80	CDNA O

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ATOM	4237	OS'	ADE	14	73.942	-12.046	-3.460	1.00	46.48	CDNA O
ATOM	4238	N9	ADE	14	77.226	-11.863	-6.451	1.00	39.24	CDNA N
ATOM	4239	C4	ADE	14	77.987	-11.423	-7.502	1.00	37.97	CDNA C
ATOM	4240	N3	ADE	14	77.717	-11.556	-8.809	1.00	38.16	CDNA N
ATOM	4241	C2	ADE	14	78.658	-10.972	-9.544	1.00	38.47	CDNA C
ATOM	4242	N1	ADE	14	79.756	-10.324	-9.151	1.00	38.34	CDNA N
ATOM	4243	C6	ADE	14	80.000	-10.215	-7.830	1.00	38.92	CDNA C
ATOM	4244	N6	ADE	14	81.100	-9.570	-7.439	1.00	40.63	CDNA N
ATOM	4245	C5	ADE	14	79.073	-10.790	-6.943	1.00	37.91	CDNA C
ATOM	4246	N7	ADE	14	79.015	-10.849	-5.559	1.00	37.39	CDNA N
ATOM	4247	C8	ADE	14	77.906	-11.503	-5.319	1.00	38.18	CDNA C
ATOM	4248	C2'	ADE	14	75.642	-13.596	-5.551	1.00	42.75	CDNA C
ATOM	4249	C5'	ADE	14	73.278	-11.514	-4.603	1.00	45.54	CDNA C
ATOM	4250	C4'	ADE	14	73.756	-12.199	-5.859	1.00	44.79	CDNA C
ATOM	4251	O4'	ADE	14	74.927	-11.564	-6.414	1.00	42.45	CDNA O
ATOM	4252	C1'	ADE	14	75.941	-12.539	-6.581	1.00	40.98	CDNA C
ATOM	4253	C3'	ADE	14	74.132	-13.660	-5.669	1.00	44.72	CDNA C
ATOM	4254	O3'	ADE	14	73.777	-14.357	-6.855	1.00	48.24	CDNA O
ATOM	4255	P	ADE	15	74.258	-15.869	-7.055	1.00	51.80	CDNA P
ATOM	4256	O1P	ADE	15	73.438	-16.707	-6.136	1.00	51.14	CDNA O
ATOM	4257	O2P	ADE	15	75.749	-15.921	-6.994	1.00	52.27	CDNA O
ATOM	4258	O5'	ADE	15	73.834	-16.201	-8.544	1.00	52.58	CDNA O
ATOM	4259	N9	ADE	15	78.063	-14.565	-9.582	1.00	60.14	CDNA N
ATOM	4260	C4	ADE	15	79.233	-13.989	-10.024	1.00	61.36	CDNA C
ATOM	4261	N3	ADE	15	79.594	-13.746	-11.295	1.00	61.56	CDNA N
ATOM	4262	C2	ADE	15	80.788	-13.151	-11.344	1.00	62.20	CDNA C
ATOM	4263	N1	ADE	15	81.601	-12.792	-10.343	1.00	62.16	CDNA N
ATOM	4264	C6	ADE	15	81.213	-13.045	-9.076	1.00	62.35	CDNA C
ATOM	4265	N6	ADE	15	82.027	-12.675	-8.083	1.00	61.94	CDNA N
ATOM	4266	C5	ADE	15	79.960	-13.685	-8.887	1.00	62.11	CDNA C
ATOM	4267	N7	ADE	15	79.271	-14.085	-7.750	1.00	62.28	CDNA N
ATOM	4268	C8	ADE	15	78.160	-14.608	-8.217	1.00	61.34	CDNA C
ATOM	4269	C2'	ADE	15	76.566	-16.460	-10.420	1.00	59.25	CDNA C
ATOM	4270	C5'	ADE	15	73.544	-15.154	-9.446	1.00	55.68	CDNA C
ATOM	4271	C4'	ADE	15	74.630	-15.056	-10.488	1.00	57.99	CDNA C
ATOM	4272	O4'	ADE	15	75.785	-14.319	-10.006	1.00	58.99	CDNA O
ATOM	4273	C1'	ADE	15	76.951	-14.993	-10.433	1.00	59.44	CDNA C
ATOM	4274	C3'	ADE	15	75.158	-16.396	-11.001	1.00	58.33	CDNA C
ATOM	4275	O3'	ADE	15	75.175	-16.339	-12.432	1.00	58.31	CDNA O
ATOM	4276	P	ADE	16	75.619	-17.624	-13.284	1.00	57.94	CDNA P
ATOM	4277	O1P	ADE	16	74.845	-17.587	-14.553	1.00	58.86	CDNA O
ATOM	4278	O2P	ADE	16	75.570	-18.836	-12.419	1.00	58.29	CDNA O
ATOM	4279	O5'	ADE	16	77.130	-17.298	-13.647	1.00	55.93	CDNA O
ATOM	4280	N9	ADE	16	81.046	-16.634	-11.897	1.00	45.98	CDNA N
ATOM	4281	C4	ADE	16	82.197	-16.152	-11.327	1.00	44.94	CDNA C
ATOM	4282	N3	ADE	16	83.246	-15.599	-11.956	1.00	44.87	CDNA N
ATOM	4283	C2	ADE	16	84.174	-15.234	-11.080	1.00	44.54	CDNA C
ATOM	4284	N1	ADE	16	84.172	-15.352	-9.750	1.00	44.04	CDNA N
ATOM	4285	C6	ADE	16	83.101	-15.911	-9.152	1.00	43.65	CDNA C
ATOM	4286	N6	ADE	16	83.098	-16.029	-7.825	1.00	43.72	CDNA N
ATOM	4287	C5	ADE	16	82.050	-16.337	-9.967	1.00	44.25	CDNA C
ATOM	4288	N7	ADE	16	80.832	-16.933	-9.680	1.00	43.93	CDNA N
ATOM	4289	C8	ADE	16	80.279	-17.094	-10.857	1.00	45.43	CDNA C
ATOM	4290	C2'	ADE	16	80.230	-17.905	-13.927	1.00	48.57	CDNA C
ATOM	4291	C5'	ADE	16	77.437	-16.110	-14.356	1.00	52.64	CDNA C
ATOM	4292	C4'	ADE	16	78.908	-16.062	-14.674	1.00	50.97	CDNA C
ATOM	4293	O4'	ADE	16	79.680	-15.683	-13.514	1.00	49.56	CDNA O
ATOM	4294	C1'	ADE	16	80.733	-16.612	-13.324	1.00	47.49	CDNA C
ATOM	4295	C3'	ADE	16	79.486	-17.388	-15.147	1.00	49.35	CDNA C
ATOM	4296	O3'	ADE	16	80.407	-17.105	-16.180	1.00	49.73	CDNA O
ATOM	4297	P	ADE	17	80.781	-18.245	-17.225	1.00	51.84	CDNA P
ATOM	4298	O1P	ADE	17	80.070	-17.939	-18.503	1.00	51.57	CDNA O

ATOM	4299	O2P	ADE	17	80.553	-19.544	-16.533	1.00	51.67	CDNA O
ATOM	4300	O5'	ADE	17	82.342	-18.036	-17.438	1.00	50.73	CDNA O
ATOM	4301	N9	ADE	17	84.498	-18.317	-13.854	1.00	36.68	CDNA N
ATOM	4302	C4	ADE	17	85.034	-18.144	-12.610	1.00	34.64	CDNA C
ATOM	4303	N3	ADE	17	86.170	-17.496	-12.303	1.00	33.39	CDNA N
ATOM	4304	C2	ADE	17	86.377	-17.512	-10.989	1.00	33.90	CDNA C
ATOM	4305	N1	ADE	17	85.628	-18.061	-10.021	1.00	34.32	CDNA N
ATOM	4306	C6	ADE	17	84.488	-18.701	-10.371	1.00	34.66	CDNA C
ATOM	4307	N6	ADE	17	83.733	-19.237	-9.409	1.00	35.58	CDNA N
ATOM	4308	C5	ADE	17	84.162	-18.759	-11.737	1.00	34.62	CDNA C
ATOM	4309	N7	ADE	17	83.096	-19.326	-12.424	1.00	34.43	CDNA N
ATOM	4310	C8	ADE	17	83.347	-19.040	-13.675	1.00	35.43	CDNA C
ATOM	4311	C2'	ADE	17	85.155	-18.763	-16.232	1.00	45.19	CDNA C
ATOM	4312	C5'	ADE	17	82.875	-16.722	-17.545	1.00	49.15	CDNA C
ATOM	4313	C4'	ADE	17	84.268	-16.672	-16.965	1.00	48.13	CDNA C
ATOM	4314	O4'	ADE	17	84.237	-16.734	-15.520	1.00	45.16	CDNA O
ATOM	4315	C1'	ADE	17	85.075	-17.787	-15.078	1.00	41.70	CDNA C
ATOM	4316	C3'	ADE	17	85.175	-17.813	-17.415	1.00	48.25	CDNA C
ATOM	4317	O3'	ADE	17	86.483	-17.294	-17.621	1.00	52.92	CDNA O
ATOM	4318	P	URI	18	87.440	-17.981	-18.701	1.00	56.98	CDNA P
ATOM	4319	O1P	URI	18	88.209	-16.900	-19.372	1.00	58.00	CDNA O
ATOM	4320	O2P	URI	18	86.624	-18.916	-19.513	1.00	57.21	CDNA O
ATOM	4321	O5'	URI	18	88.440	-18.830	-17.801	1.00	60.01	CDNA O
ATOM	4322	N1	URI	18	88.892	-19.736	-12.966	1.00	66.25	CDNA N
ATOM	4323	C6	URI	18	87.901	-20.323	-13.705	1.00	66.51	CDNA C
ATOM	4324	C2	URI	18	88.881	-19.784	-11.589	1.00	66.55	CDNA C
ATOM	4325	O2	URI	18	89.768	-19.309	-10.904	1.00	68.23	CDNA O
ATOM	4326	N3	URI	18	87.793	-20.418	-11.044	1.00	66.66	CDNA N
ATOM	4327	C4	URI	18	86.753	-21.006	-11.728	1.00	66.03	CDNA C
ATOM	4328	O4	URI	18	85.768	-21.392	-11.100	1.00	67.35	CDNA O
ATOM	4329	C5	URI	18	86.872	-20.949	-13.157	1.00	66.48	CDNA C
ATOM	4330	I5	URI	18	85.690	-22.065	-14.312	1.00	69.35	CDNA I
ATOM	4331	C2'	URI	18	90.742	-19.903	-14.630	1.00	66.39	CDNA C
ATOM	4332	C5'	URI	18	88.345	-18.784	-16.381	1.00	63.33	CDNA C
ATOM	4333	C4'	URI	18	89.592	-18.170	-15.792	1.00	65.12	CDNA C
ATOM	4334	O4'	URI	18	89.375	-17.974	-14.384	1.00	64.80	CDNA O
ATOM	4335	C1'	URI	18	89.983	-19.022	-13.637	1.00	65.79	CDNA C
ATOM	4336	C3'	URI	18	90.833	-19.049	-15.882	1.00	66.69	CDNA C
ATOM	4337	O3'	URI	18	92.002	-18.221	-15.887	1.00	69.10	CDNA O
ATOM	4338	P	URI	19	93.451	-18.887	-15.706	1.00	69.91	CDNA P
ATOM	4339	O1P	URI	19	94.447	-17.811	-15.954	1.00	69.93	CDNA O
ATOM	4340	O2P	URI							

ATOM	4361	O5'	URI	20	97.261	-21.233	-9.491	1.00	69.25	CDNA	O
ATOM	4362	N1	URI	20	93.924	-24.660	-8.194	1.00	64.32	CDNA	N
ATOM	4363	C6	URI	20	94.208	-24.417	-9.491	1.00	63.45	CDNA	C
ATOM	4364	C2	URI	20	92.908	-25.510	-7.833	1.00	64.27	CDNA	C
ATOM	4365	O2	URI	20	92.621	-25.751	-6.678	1.00	66.11	CDNA	O
ATOM	4366	N3	URI	20	92.235	-26.067	-8.885	1.00	64.40	CDNA	N
ATOM	4367	C4	URI	20	92.479	-25.859	-10.214	1.00	63.32	CDNA	C
ATOM	4368	O4	URI	20	91.720	-26.335	-11.052	1.00	64.30	CDNA	O
ATOM	4369	C5	URI	20	93.556	-24.978	-10.478	1.00	63.49	CDNA	C
ATOM	4370	I5	URI	20	94.265	-24.819	-12.295	1.00	67.29	CDNA	I
ATOM	4371	C2'	URI	20	96.188	-24.381	-7.306	1.00	66.68	CDNA	C
ATOM	4372	C5'	URI	20	95.983	-21.765	-9.173	1.00	67.63	CDNA	C
ATOM	4373	C4'	URI	20	95.902	-22.039	-7.693	1.00	67.23	CDNA	C
ATOM	4374	O4'	URI	20	94.616	-22.611	-7.391	1.00	65.86	CDNA	O
ATOM	4375	C1'	URI	20	94.721	-24.009	-7.155	1.00	65.30	CDNA	C
ATOM	4376	C3'	URI	20	96.924	-23.059	-7.222	1.00	67.26	CDNA	C
ATOM	4377	O3'	URI	20	97.318	-22.779	-5.889	1.00	69.55	CDNA	O
ATOM	4378	P	URI	21	98.205	-23.847	-5.102	1.00	71.63	CDNA	P
ATOM	4379	O1P	URI	21	98.813	-23.137	-3.951	1.00	71.66	CDNA	O
ATOM	4380	O2P	URI	21	99.070	-24.538	-6.084	1.00	71.68	CDNA	O
ATOM	4381	O5'	URI	21	97.134	-24.893	-4.562	1.00	72.60	CDNA	O
ATOM	4382	N1	URI	21	94.563	-27.787	-5.909	1.00	75.99	CDNA	N
ATOM	4383	C6	URI	21	95.516	-27.422	-6.820	1.00	76.39	CDNA	C
ATOM	4384	C2	URI	21	93.389	-28.402	-6.313	1.00	75.45	CDNA	C
ATOM	4385	O2	URI	21	92.523	-28.754	-5.535	1.00	76.83	CDNA	O
ATOM	4386	N3	URI	21	93.268	-28.587	-7.663	1.00	76.53	CDNA	N
ATOM	4387	C4	URI	21	94.177	-28.231	-8.624	1.00	76.89	CDNA	C
ATOM	4388	O4	URI	21	93.912	-28.434	-9.806	1.00	79.51	CDNA	O
ATOM	4389	C5	URI	21	95.365	-27.613	-8.125	1.00	77.16	CDNA	C
ATOM	4390	I5	URI	21	96.789	-27.038	-9.386	1.00	78.26	CDNA	I
ATOM	4391	C2'	URI	21	96.130	-27.784	-3.937	1.00	75.47	CDNA	C
ATOM	4392	C5'	URI	21	96.150	-24.488	-3.616	1.00	74.04	CDNA	C
ATOM	4393	C4'	URI	21	95.333	-25.675	-3.169	1.00	74.91	CDNA	C
ATOM	4394	O4'	URI	21	94.505	-26.145	-4.258	1.00	74.57	CDNA	O
ATOM	4395	C1'	URI	21	94.738	-27.526	-4.475	1.00	75.09	CDNA	C
ATOM	4396	C3'	URI	21	96.152	-26.880	-2.719	1.00	75.04	CDNA	C
ATOM	4397	O3'	URI	21	95.478	-27.523	-1.639	1.00	75.88	CDNA	O
ATOM	4398	P	THY	22	96.330	-28.224	-0.475	1.00	75.80	CDNA	P
ATOM	4399	O1P	THY	22	96.263	-27.341	0.719	1.00	76.26	CDNA	O
ATOM	4400	O2P	THY	22	97.653	-28.596	-1.039	1.00	76.17	CDNA	O
ATOM	4401	O5'	THY	22	95.511	-29.553	-0.162	1.00	74.84	CDNA	O
ATOM	4402	N1	THY	22	95.200	-31.300	-3.883	1.00	71.02	CDNA	N
ATOM	4403	C6	THY	22	96.471	-30.846	-3.608	1.00	69.89	CDNA	C
ATOM	4404	C2	THY	22	94.750	-31.440	-5.185	1.00	70.26	CDNA	C
ATOM	4405	O2	THY	22	93.632	-31.839	-5.472	1.00	70.22	CDNA	O
ATOM	4406	N3	THY	22	95.665	-31.093	-6.145	1.00	70.08	CDNA	N
ATOM	4407	C4	THY	22	96.952	-30.627	-5.944	1.00	69.88	CDNA	C
ATOM	4408	O4	THY	22	97.658	-30.344	-6.915	1.00	70.93	CDNA	O
ATOM	4409	C5	THY	22	97.359	-30.510	-4.553	1.00	69.72	CDNA	C
ATOM	4410	C5A	THY	22	98.739	-30.026	-4.233	1.00	68.96	CDNA	C
ATOM	4411	C2'	THY	22	94.955	-32.343	-1.603	1.00	72.60	CDNA	C
ATOM	4412	C5'	THY	22	94.092	-29.515	-0.041	1.00	73.57	CDNA	C
ATOM	4413	C4'	THY	22	93.465	-30.640	-0.835	1.00	73.60	CDNA	C
ATOM	4414	O4'	THY	22	93.732	-30.458	-2.252	1.00	72.97	CDNA	O
ATOM	4415	C1'	THY	22	94.288	-31.656	-2.781	1.00	71.86	CDNA	C
ATOM	4416	C3'	THY	22	93.968	-32.046	-0.488	1.00	73.03	CDNA	C
ATOM	4417	O3'	THY	22	92.917	-33.018	-0.625	1.00	72.78	CDNA	O
TER	4418		THY	22						CDNA	
ATOM	4419	O5'	ADE	101	90.000	-37.082	-14.289	1.00	60.27	BDNA	O
ATOM	4420	N9	ADE	101	89.704	-34.940	-11.428	1.00	52.31	BDNA	N
ATOM	4421	C4	ADE	101	90.344	-34.633	-10.265	1.00	51.15	BDNA	C
ATOM	4422	N3	ADE	101	90.071	-35.120	-9.049	1.00	50.91	BDNA	N

ATOM	4423	C2	ADE	101	90.880	-34.586	-8.147	1.00	52.12	BDNA C
ATOM	4424	N1	ADE	101	91.864	-33.692	-8.313	1.00	51.88	BDNA N
ATOM	4425	C6	ADE	101	92.118	-33.235	-9.555	1.00	51.56	BDNA C
ATOM	4426	N6	ADE	101	93.111	-32.364	-9.718	1.00	52.11	BDNA N
ATOM	4427	C5	ADE	101	91.316	-33.717	-10.600	1.00	51.16	BDNA C
ATOM	4428	N7	ADE	101	91.292	-33.455	-11.961	1.00	50.88	BDNA N
ATOM	4429	C8	ADE	101	90.322	-34.209	-12.406	1.00	51.03	BDNA C
ATOM	4430	C2'	ADE	101	87.658	-35.573	-12.687	1.00	57.60	BDNA C
ATOM	4431	C5'	ADE	101	89.126	-38.165	-13.935	1.00	59.94	BDNA C
ATOM	4432	C4'	ADE	101	88.291	-37.868	-12.711	1.00	59.11	BDNA C
ATOM	4433	O4'	ADE	101	89.119	-37.162	-11.759	1.00	57.41	BDNA O
ATOM	4434	C1'	ADE	101	88.588	-35.865	-11.531	1.00	55.35	BDNA C
ATOM	4435	C3'	ADE	101	87.093	-36.951	-12.964	1.00	58.75	BDNA C
ATOM	4436	O3'	ADE	101	86.028	-37.272	-12.050	1.00	60.41	BDNA O
ATOM	4437	P	ADE	102	85.040	-36.110	-11.520	1.00	61.51	BDNA P
ATOM	4438	O1P	ADE	102	83.894	-36.768	-10.824	1.00	60.87	BDNA O
ATOM	4439	O2P	ADE	102	84.776	-35.156	-12.631	1.00	62.20	BDNA O
ATOM	4440	O5'	ADE	102	85.912	-35.358	-10.422	1.00	60.10	BDNA O
ATOM	4441	N9	ADE	102	88.121	-32.286	-8.833	1.00	50.02	BDNA N
ATOM	4442	C4	ADE	102	89.251	-31.644	-8.385	1.00	47.69	BDNA C
ATOM	4443	N3	ADE	102	89.661	-31.502	-7.111	1.00	46.39	BDNA N
ATOM	4444	C2	ADE	102	90.791	-30.801	-7.060	1.00	46.03	BDNA C
ATOM	4445	N1	ADE	102	91.497	-30.256	-8.059	1.00	45.62	BDNA N
ATOM	4446	C6	ADE	102	91.047	-30.409	-9.323	1.00	45.75	BDNA C
ATOM	4447	N6	ADE	102	91.722	-29.838	-10.315	1.00	45.49	BDNA N
ATOM	4448	C5	ADE	102	89.878	-31.153	-9.516	1.00	46.55	BDNA C
ATOM	4449	N7	ADE	102	89.181	-31.511	-10.660	1.00	47.17	BDNA N
ATOM	4450	C8	ADE	102	88.152	-32.184	-10.203	1.00	48.77	BDNA C
ATOM	4451	C2'	ADE	102	85.687	-32.795	-8.565	1.00	55.04	BDNA C
ATOM	4452	C5'	ADE	102	86.263	-36.028	-9.220	1.00	57.89	BDNA C
ATOM	4453	C4'	ADE	102	86.172	-35.080	-8.050	1.00	57.07	BDNA C
ATOM	4454	O4'	ADE	102	87.386	-34.300	-7.959	1.00	54.40	BDNA O
ATOM	4455	C1'	ADE	102	87.096	-32.918	-8.006	1.00	52.22	BDNA C
ATOM	4456	C3'	ADE	102	85.014	-34.083	-8.115	1.00	56.90	BDNA C
ATOM	4457	O3'	ADE	102	84.364	-34.006	-6.830	1.00	60.24	BDNA O
ATOM	4458	P	ADE	103	84.088	-32.578	-6.136	1.00	62.72	BDNA P
ATOM	4459	O1P	ADE	103	83.473	-32.846	-4.805	1.00	62.84	BDNA O
ATOM	4460	O2P	ADE	103	83.397	-31.678	-7.095	1.00	63.15	BDNA O
ATOM	4461	O5'	ADE	103	85.555	-32.030	-5.862	1.00	62.91	BDNA O
ATOM	4462	N9	ADE	103	87.393	-29.223	-6.156	1.00	58.18	BDNA N
ATOM	4463	C4	ADE	103	88.437	-28.509	-6.689	1.00	56.65	BDNA C
ATOM	4464	N3	ADE	103	89.403	-27.858	-6.022	1.00	56.69	BDNA N
ATOM	4465	C2	ADE	103	90.246	-27.282	-6.868	1.00	56.11	BDNA C
ATOM	4466	N1	ADE	103	90.232	-27.280	-8.201	1.00	56.10	BDNA N
ATOM	4467	C6	ADE	103	89.247	-27.940	-8.839	1.00	55.71	BDNA C
ATOM	4468	N6	ADE	103	89.234	-27.932	-10.171	1.00	55.56	BDNA N
ATOM	4469	C5	ADE	103	88.292	-28.597	-8.056	1.00	55.76	BDNA C
ATOM	4470	N7	ADE	103	87.181	-29.360	-8.383	1.00	56.24	BDNA N
ATOM	4471	C8	ADE	103	86.684	-29.706	-7.223	1.00	56.46	BDNA C
ATOM	4472	C2'	ADE	103	85.615	-29.511	-4.427	1.00	63.00	BDNA C
ATOM	4473	C5'	ADE	103	86.341	-32.607	-4.827	1.00	63.48	BDNA C
ATOM	4474	C4'	ADE	103	86.691	-31.550	-3.811	1.00	64.27	BDNA C
ATOM	4475	O4'	ADE	103	87.687	-30.674	-4.386	1.00	62.27	BDNA O
ATOM	4476	C1'	ADE	103	87.111	-29.427	-4.739	1.00	60.72	BDNA C
ATOM	4477	C3'	ADE	103	85.513	-30.655	-3.430	1.00	64.08	BDNA C
ATOM	4478	O3'	ADE	103	85.628	-30.253	-2.052	1.00	65.89	BDNA O
ATOM	4479	P	ADE	104	85.064	-28.822	-1.574	1.00	67.68	BDNA P
ATOM	4480	O1P	ADE	104	84.878	-28.895	-0.098	1.00	67.21	BDNA O
ATOM	4481	O2P	ADE	104	83.916	-28.434	-2.444	1.00	67.54	BDNA O
ATOM	4482	O5'	ADE	104	86.278	-27.835	-1.868	1.00	66.25	BDNA O
ATOM	4483	N9	ADE	104	87.935	-25.468	-4.704	1.00	59.05	BDNA N
ATOM	4484	C4	ADE	104	88.588	-24.914	-5.775	1.00	58.01	BDNA C

ATOM	4485	N3	ADE	104	89.719	-24.192	-5.750	1.00	57.88	BDNA N
ATOM	4486	C2	ADE	104	90.067	-23.828	-6.981	1.00	58.16	BDNA C
ATOM	4487	N1	ADE	104	89.461	-24.091	-8.145	1.00	58.47	BDNA N
ATOM	4488	C6	ADE	104	88.331	-24.829	-8.133	1.00	53.29	BDNA C
ATOM	4489	N6	ADE	104	87.739	-25.107	-9.294	1.00	58.15	BDNA N
ATOM	4490	C5	ADE	104	87.851	-25.265	-6.889	1.00	58.08	BDNA C
ATOM	4491	N7	ADE	104	86.740	-26.009	-6.525	1.00	58.30	BDNA N
ATOM	4492	C8	ADE	104	86.832	-26.095	-5.220	1.00	58.42	BDNA C
ATOM	4493	C2'	ADE	104	87.330	-24.962	-2.317	1.00	62.72	BDNA C
ATOM	4494	C5'	ADE	104	87.572	-28.106	-1.342	1.00	64.80	BDNA C
ATOM	4495	C4'	ADE	104	88.465	-26.903	-1.518	1.00	64.07	BDNA C
ATOM	4496	O4'	ADE	104	88.751	-26.719	-2.923	1.00	62.64	BDNA O
ATOM	4497	C1'	ADE	104	88.379	-25.406	-3.316	1.00	61.37	BDNA C
ATOM	4498	C3'	ADE	104	87.860	-25.583	-1.037	1.00	63.23	BDNA C
ATOM	4499	O3'	ADE	104	88.891	-24.762	-0.482	1.00	63.89	BDNA O
ATOM	4500	P	ADE	105	88.503	-23.436	0.338	1.00	64.54	BDNA P
ATOM	4501	O1P	ADE	105	88.986	-23.608	1.736	1.00	64.35	BDNA O
ATOM	4502	O2P	ADE	105	87.073	-23.109	0.087	1.00	64.94	BDNA O
ATOM	4503	O5'	ADE	105	89.405	-22.312	-0.337	1.00	64.30	BDNA O
ATOM	4504	N9	ADE	105	88.945	-21.103	-4.142	1.00	63.19	BDNA N
ATOM	4505	C4	ADE	105	88.793	-20.902	-5.494	1.00	63.03	BDNA C
ATOM	4506	N3	ADE	105	89.662	-20.310	-6.334	1.00	62.84	BDNA N
ATOM	4507	C2	ADE	105	89.191	-20.318	-7.582	1.00	62.78	BDNA C
ATOM	4508	N1	ADE	105	88.036	-20.807	-8.051	1.00	62.38	BDNA N
ATOM	4509	C6	ADE	105	87.182	-21.389	-7.182	1.00	62.53	BDNA C
ATOM	4510	N6	ADE	105	86.029	-21.868	-7.650	1.00	61.75	BDNA N
ATOM	4511	C5	ADE	105	87.568	-21.452	-5.823	1.00	62.85	BDNA C
ATOM	4512	N7	ADE	105	86.950	-21.978	-4.694	1.00	63.59	BDNA N
ATOM	4513	C8	ADE	105	87.803	-21.740	-3.726	1.00	63.18	BDNA C
ATOM	4514	C2'	ADE	105	89.851	-19.840	-2.162	1.00	63.68	BDNA C
ATOM	4515	C5'	ADE	105	90.802	-22.516	-0.496	1.00	64.21	BDNA C
ATOM	4516	C4'	ADE	105	91.338	-21.610	-1.577	1.00	64.31	BDNA C
ATOM	4517	O4'	ADE	105	90.689	-21.913	-2.832	1.00	63.87	BDNA O
ATOM	4518	C1'	ADE	105	90.115	-20.724	-3.358	1.00	63.54	BDNA C
ATOM	4519	C3'	ADE	105	91.092	-20.123	-1.338	1.00	63.92	BDNA C
ATOM	4520	O3'	ADE	105	92.202	-19.401	-1.869	1.00	63.84	BDNA O
ATOM	4521	P	THY	106	92.495	-17.913	-1.358	1.00	63.33	BDNA P
ATOM	4522	O1P	THY	106	93.836	-17.499	-1.869	1.00	62.60	BDNA O
ATOM	4523	O2P	THY	106	92.210	-17.874	0.105	1.00	63.47	BDNA O
ATOM	4524	O5'	THY	106	91.376	-17.045	-2.084	1.00	62.20	BDNA O
ATOM	4525	N1	THY	106	89.142	-16.931	-6.604	1.00	52.05	BDNA N
ATOM	4526	C6	THY	106	88.458	-17.519	-5.565	1.00	49.04	BDNA C
ATOM	4527	C2	THY	106	88.606	-16.857	-7.869	1.00	51.01	BDNA C
ATOM	4528	O2	THY	106	89.189	-16.341	-8.811	1.00	51.13	BDNA O
ATOM	4529	N3	THY	106	87.358	-17.418	-7.992	1.00	49.71	BDNA N
ATOM	4530	C4	THY	106	86.621	-18.031	-6.995	1.00	48.49	BDNA C
ATOM	4531	O4	THY	106	85.509	-18.487	-7.248	1.00	47.64	BDNA O
ATOM	4532	C5	THY	106	87.253	-18.072	-5.697	1.00	47.87	BDNA C
ATOM	4533	C5A	THY	106	86.540	-18.734	-4.566	1.00	46.72	BDNA C
ATOM	4534	C2'	THY	106	90.506	-15.139	-5.496	1.00	55.66	BDNA C
ATOM	4535	C5'	THY	106	90.861	-17.437	-3.346	1.00	59.57	BDNA C
ATOM	4536	C4'	THY	106	91.727	-16.884	-4.453	1.00	58.01	BDNA C
ATOM	4537	O4'	THY	106	91.213	-17.392	-5.694	1.00	56.63	BDNA O
ATOM	4538	C1'	THY	106	90.482	-16.384	-6.375	1.00	54.27	BDNA C
ATOM	4539	C3'	THY	106	91.714	-15.367	-4.607	1.00	56.69	BDNA C
ATOM	4540	O3'	THY	106	92.941	-14.964	-5.231	1.00	58.12	BDNA O
ATOM	4541	P	URI	107	93.175	-13.428	-5.658	1.00	59.84	BDNA P
ATOM	4542	O1P	URI	107	94.605	-13.111	-5.438	1.00	59.81	BDNA O
ATOM	4543	O2P	URI	107	92.145	-12.577	-5.043	1.00	61.33	BDNA O
ATOM	4544	O5'	URI	107	92.907	-13.404	-7.229	1.00	60.79	BDNA O
ATOM	4545	N1	URI	107	88.131	-13.221	-8.972	1.00	62.13	BDNA N
ATOM	4546	C6	URI	107	88.190	-13.271	-7.605	1.00	63.07	BDNA C



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ATOM	4547	C2	URI	107	87.012	-13.608	-9.654	1.00	62.28	BDNA	C
ATOM	4548	O2	URI	107	86.920	-13.544	-10.866	1.00	62.59	BDNA	O
ATOM	4549	N3	URI	107	85.997	-14.070	-8.868	1.00	63.33	BDNA	N
ATOM	4550	C4	URI	107	85.987	-14.163	-7.502	1.00	63.20	BDNA	C
ATOM	4551	O4	URI	107	85.006	-14.637	-6.940	1.00	65.03	BDNA	O
ATOM	4552	C5	URI	107	87.178	-13.712	-6.865	1.00	63.79	BDNA	C
ATOM	4553	I5	URI	107	87.278	-13.644	-4.865	1.00	69.12	BDNA	I
ATOM	4554	C2'	URI	107	89.921	-11.515	-9.200	1.00	63.39	BDNA	C
ATOM	4555	C5'	URI	107	91.627	-13.753	-7.747	1.00	62.82	BDNA	C
ATOM	4556	C4'	URI	107	91.488	-13.297	-9.181	1.00	63.49	BDNA	C
ATOM	4557	O4'	URI	107	90.241	-13.806	-9.690	1.00	62.69	BDNA	O
ATOM	4558	C1'	URI	107	89.275	-12.769	-9.760	1.00	62.53	BDNA	C
ATOM	4559	C3'	URI	107	91.402	-11.789	-9.375	1.00	63.84	BDNA	C
ATOM	4560	O3'	URI	107	91.858	-11.456	-10.694	1.00	65.09	BDNA	O
ATOM	4561	P	URI	108	91.278	-10.153	-11.437	1.00	65.93	BDNA	P
ATOM	4562	O1P	URI	108	92.148	-9.916	-12.620	1.00	65.64	BDNA	O
ATOM	4563	O2P	URI	108	91.067	-9.061	-10.449	1.00	66.54	BDNA	O
ATOM	4564	O5'	URI	108	89.847	-10.621	-11.950	1.00	65.71	BDNA	O
ATOM	4565	N1	URI	108	85.850	-10.794	-11.427	1.00	60.33	BDNA	N
ATOM	4566	C6	URI	108	86.625	-10.426	-10.363	1.00	60.06	BDNA	C
ATOM	4567	C2	URI	108	84.538	-11.162	-11.262	1.00	60.91	BDNA	C
ATOM	4568	O2	URI	108	83.825	-11.472	-12.195	1.00	62.03	BDNA	O
ATOM	4569	N3	URI	108	84.090	-11.157	-9.965	1.00	61.12	BDNA	N
ATOM	4570	C4	URI	108	84.816	-10.824	-8.846	1.00	60.00	BDNA	C
ATOM	4571	O4	URI	108	84.305	-10.957	-7.731	1.00	60.16	BDNA	O
ATOM	4572	C5	URI	108	86.168	-10.429	-9.112	1.00	60.23	BDNA	C
ATOM	4573	I5	URI	108	87.329	-9.784	-7.632	1.00	63.22	BDNA	I
ATOM	4574	C2'	URI	108	87.117	-9.580	-13.236	1.00	62.26	BDNA	C
ATOM	4575	C5'	URI	108	89.740	-11.643	-12.930	1.00	64.48	BDNA	C
ATOM	4576	C4'	URI	108	88.439	-11.516	-13.686	1.00	63.65	BDNA	C
ATOM	4577	O4'	URI	108	87.336	-11.878	-12.826	1.00	61.94	BDNA	O
ATOM	4578	C1'	URI	108	86.386	-10.832	-12.788	1.00	61.01	BDNA	C
ATOM	4579	C3'	URI	108	88.106	-10.133	-14.248	1.00	63.09	BDNA	C
ATOM	4580	O3'	URI	108	87.505	-10.310	-15.540	1.00	64.84	BDNA	O
ATOM	4581	P	URI	109	86.907	-9.049	-16.343	1.00	65.32	BDNA	P
ATOM	4582	O1P	URI	109	87.548	-8.985	-17.686	1.00	65.31	BDNA	O
ATOM	4583	O2P	URI	109	86.956	-7.866	-15.442	1.00	66.10	BDNA	O
ATOM	4584	O5'	URI	109	85.381	-9.449	-16.523	1.00	64.58	BDNA	O
ATOM	4585	N1	URI	109	81.832	-8.995	-12.913	1.00	59.35	BDNA	N
ATOM	4586	C6	URI	109	83.013	-8.381	-12.583	1.00	58.24	BDNA	C
ATOM	4587	C2	URI	109	80.842	-9.180	-11.979	1.00	59.78	BDNA	C
ATOM	4588	O2	URI	109	79.777	-9.703	-12.244	1.00	60.79	BDNA	O
ATOM	4589	N3	URI	109	81.142	-8.728	-10.722	1.00	59.86	BDNA	N
ATOM	4590	C4	URI	109	82.303	-8.117	-10.322	1.00	58.42	BDNA	C
ATOM	4591	O4	URI	109	82.432	-7.774	-9.150	1.00	59.19	BDNA	O
ATOM	4592	C5	URI	109	83.270	-7.946	-11.352	1.00	57.96	BDNA	C
ATOM	4593	I5	URI	109	84.981	-7.009	-10.951	1.00	58.34	BDNA	I
ATOM	4594	C2'	URI	109	81.735	-8.449	-15.365	1.00	61.67	BDNA	C
ATOM	4595	C5'	URI	109	84.605	-9.733	-15.369	1.00	63.78	BDNA	C
ATOM	4596	C4'	URI	109	83.240	-10.246	-15.750	1.00	62.92	BDNA	C
ATOM	4597	O4'	URI	109	82.539	-10.508	-14.518	1.00	61.44	BDNA	O
ATOM	4598	C1'	URI	109	81.579	-9.493	-14.268	1.00	60.37	BDNA	C
ATOM	4599	C3'	URI	109	82.377	-9.236	-16.496	1.00	62.41	BDNA	C
ATOM	4600	O3'	URI	109	81.421	-9.959	-17.287	1.00	62.59	BDNA	O
ATOM	4601	P	URI	110	80.606	-9.213	-18.458	1.00	62.08	BDNA	P
ATOM	4602	O1P	URI	110	80.255	-10.251	-19.467	1.00	61.79	BDNA	O
ATOM	4603	O2P	URI	110	81.354	-7.995	-18.876	1.00	61.98	BDNA	O
ATOM	4604	O5'	URI	110	79.255	-8.750	-17.753	1.00	60.09	BDNA	O
ATOM	4605	N1	URI	110	77.920	-7.653	-12.926	1.00	49.89	BDNA	N
ATOM	4606	C6	URI	110	78.984	-6.907	-13.363	1.00	49.90	BDNA	C
ATOM	4607	C2	URI	110	77.638	-7.773	-11.587	1.00	49.32	BDNA	C
ATOM	4608	O2	URI	110	76.691	-8.413	-11.170	1.00	48.58	BDNA	O

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ATOM	4609	N3	URI	110	78.502	-7.117	-10.755	1.00	49.36	BDNA	N
ATOM	4610	C4	URI	110	79.587	-6.364	-11.124	1.00	49.76	BDNA	C
ATOM	4611	O4	URI	110	80.241	-5.784	-10.260	1.00	50.79	BDNA	O
ATOM	4612	C5	URI	110	79.807	-6.284	-12.531	1.00	50.32	BDNA	C
ATOM	4613	I5	URI	110	81.433	-5.363	-13.230	1.00	57.35	BDNA	I
ATOM	4614	C2'	URI	110	76.520	-7.499	-15.003	1.00	51.74	BDNA	C
ATOM	4615	C5'	URI	110	79.156	-8.714	-16.339	1.00	55.89	BDNA	C
ATOM	4616	C4'	URI	110	77.830	-9.280	-15.901	1.00	53.21	BDNA	C
ATOM	4617	O4'	URI	110	77.844	-9.389	-14.464	1.00	53.19	BDNA	O
ATOM	4618	C1'	URI	110	77.051	-8.368	-13.870	1.00	51.45	BDNA	C
ATOM	4619	C3'	URI	110	76.646	-8.384	-16.234	1.00	51.59	BDNA	C
ATOM	4620	O3'	URI	110	75.476	-9.181	-16.473	1.00	49.11	BDNA	O
ATOM	4621	P	CYT	111	74.092	-8.471	-16.913	1.00	46.57	BDNA	P
ATOM	4622	O1P	CYT	111	73.188	-9.564	-17.363	1.00	46.19	BDNA	O
ATOM	4623	O2P	CYT	111	74.389	-7.347	-17.841	1.00	46.97	BDNA	O
ATOM	4624	O5'	CYT	111	73.525	-7.904	-15.533	1.00	42.43	BDNA	O
ATOM	4625	N1	CYT	111	74.412	-5.589	-11.788	1.00	26.58	BDNA	N
ATOM	4626	C6	CYT	111	75.312	-5.335	-12.780	1.00	24.86	BDNA	C
ATOM	4627	C2	CYT	111	74.699	-5.234	-10.467	1.00	25.86	BDNA	C
ATOM	4628	O2	CYT	111	73.803	-5.338	-9.606	1.00	27.70	BDNA	O
ATOM	4629	N3	CYT	111	75.935	-4.779	-10.162	1.00	23.51	BDNA	N
ATOM	4630	C4	CYT	111	76.832	-4.605	-11.128	1.00	23.37	BDNA	C
ATOM	4631	N4	CYT	111	78.047	-4.191	-10.781	1.00	24.00	BDNA	N
ATOM	4632	C5	CYT	111	76.525	-4.851	-12.496	1.00	24.05	BDNA	C
ATOM	4633	C2'	CYT	111	72.324	-5.738	-13.234	1.00	29.92	BDNA	C
ATOM	4634	C5'	CYT	111	73.175	-8.820	-14.504	1.00	36.76	BDNA	C
ATOM	4635	C4'	CYT	111	72.498	-8.121	-13.350	1.00	33.18	BDNA	C
ATOM	4636	O4'	CYT	111	73.469	-7.604	-12.415	1.00	31.82	BDNA	O
ATOM	4637	C1'	CYT	111	73.144	-6.272	-12.072	1.00	28.61	BDNA	C
ATOM	4638	C3'	CYT	111	71.549	-6.972	-13.683	1.00	31.72	BDNA	C
ATOM	4639	O3'	CYT	111	70.347	-7.155	-12.923	1.00	31.05	BDNA	O
ATOM	4640	P	ADE	112	69.066	-6.228	-13.206	1.00	30.54	BDNA	P
ATOM	4641	O1P	ADE	112	67.858	-7.042	-12.900	1.00	30.17	BDNA	O
ATOM	4642	O2P	ADE	112	69.209	-5.624	-14.559	1.00	31.10	BDNA	O
ATOM	4643	O5'	ADE	112	69.187	-5.095	-12.079	1.00	29.52	BDNA	O
ATOM	4644	N9	ADE	112	72.314	-2.639	-10.437	1.00	28.34	BDNA	N
ATOM	4645	C4	ADE	112	73.412	-2.256	-9.714	1.00	28.30	BDNA	C
ATOM	4646	N3	ADE	112	73.459	-1.985	-8.397	1.00	28.50	BDNA	N
ATOM	4647	C2	ADE	112	74.684	-1.609	-8.041	1.00	29.33	BDNA	C
ATOM	4648	N1	ADE	112	75.784	-1.492	-8.795	1.00	30.53	BDNA	N
ATOM	4649	C6	ADE	112	75.699	-1.783	-10.117	1.00	30.18	BDNA	C
ATOM	4650	N6	ADE	112	76.799	-1.679	-10.871	1.00	31.52	BDNA	N
ATOM	4651	C5	ADE	112	74.452	-2.184	-10.619	1.00	28.80	BDNA	C
ATOM	4652	N7	ADE	112	74.023	-2.540	-11.892	1.00	28.22	BDNA	N
ATOM	4653	C8	ADE	112	72.751	-2.811	-11.729	1.00	28.18	BDNA	C
ATOM	4654	C2'	ADE	112	69.867	-2.191	-10.717	1.00	26.77	BDNA	C
ATOM	4655	C5'	ADE	112	68.809	-5.386	-10.722	1.00	28.55	BDNA	C
ATOM	4656	C4'	ADE	112	69.223	-4.280	-9.777	1.00	26.85	BDNA	C
ATOM	4657	O4'	ADE	112	70.665	-4.146	-9.750	1.00	28.79	BDNA	O
ATOM	4658	C1'	ADE	112	70.976	-2.773	-9.875	1.00	28.22	BDNA	C
ATOM	4659	C3'	ADE	112	68.680	-2.884	-10.084	1.00	26.53	BDNA	C
ATOM	4660	O3'	ADE	112	68.424	-2.208	-8.862	1.00	24.36	BDNA	O
ATOM	4661	P	ADE	113	66.997	-2.359	-8.162	1.00	24.72	BDNA	P
ATOM	4662	O1P	ADE	113	66.662	-3.810	-8.243	1.00	23.76	BDNA	O
ATOM	4663	O2P	ADE	113	66.027	-1.346	-8.657	1.00	24.52	BDNA	O
ATOM	4664	O5'	ADE	113	67.321	-1.977	-6.658	1.00	24.69	BDNA	O
ATOM	4665	N9	ADE	113	71.230	0.001	-6.824	1.00	19.51	BDNA	N
ATOM	4666	C4	ADE	113	72.371	0.766	-6.967	1.00	19.15	BDNA	C
ATOM	4667	N3	ADE	113	73.096	1.351	-5.996	1.00	20.42	BDNA	N
ATOM	4668	C2	ADE	113	74.154	1.999	-6.513	1.00	19.92	BDNA	C
ATOM	4669	N1	ADE	113	74.547	2.107	-7.790	1.00	18.90	BDNA	N
ATOM	4670	C6	ADE	113	73.806	1.497	-8.741	1.00	18.21	BDNA	C

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ATOM	4671	N6	ADE	113	74.218	1.577	-10.007	1.00	16.62	BDNA	N
ATOM	4672	C5	ADE	113	72.641	0.797	-8.326	1.00	18.12	BDNA	C
ATOM	4673	N7	ADE	113	71.668	0.103	-9.031	1.00	19.60	BDNA	N
ATOM	4674	C8	ADE	113	70.852	-0.340	-8.099	1.00	20.11	BDNA	C
ATOM	4675	C2'	ADE	113	69.277	0.289	-5.212	1.00	19.61	BDNA	C
ATOM	4676	C5'	ADE	113	68.071	-2.865	-5.841	1.00	23.72	BDNA	C
ATOM	4677	C4'	ADE	113	69.041	-2.093	-4.981	1.00	21.49	BDNA	C
ATOM	4678	O4'	ADE	113	70.254	-1.793	-5.712	1.00	19.77	BDNA	O
ATOM	4679	C1'	ADE	113	70.581	-0.417	-5.574	1.00	19.66	BDNA	C
ATOM	4680	C3'	ADE	113	68.514	-0.769	-4.421	1.00	21.29	BDNA	C
ATOM	4681	O3'	ADE	113	68.774	-0.727	-3.012	1.00	22.48	BDNA	O
ATOM	4682	P	ADE	114	68.281	0.530	-2.131	1.00	24.88	BDNA	P
ATOM	4683	O1P	ADE	114	68.239	0.090	-0.703	1.00	23.40	BDNA	O
ATOM	4684	O2P	ADE	114	67.084	1.200	-2.734	1.00	24.72	BDNA	O
ATOM	4685	O5'	ADE	114	69.519	1.514	-2.252	1.00	23.44	BDNA	O
ATOM	4686	N9	ADE	114	71.669	4.042	-4.618	1.00	15.41	BDNA	N
ATOM	4687	C4	ADE	114	72.405	4.760	-5.524	1.00	15.65	BDNA	C
ATOM	4688	N3	ADE	114	73.354	5.670	-5.259	1.00	16.26	BDNA	N
ATOM	4689	C2	ADE	114	73.911	6.107	-6.391	1.00	17.98	BDNA	C
ATOM	4690	N1	ADE	114	73.646	5.756	-7.659	1.00	17.59	BDNA	N
ATOM	4691	C6	ADE	114	72.678	4.840	-7.881	1.00	16.09	BDNA	C
ATOM	4692	N6	ADE	114	72.417	4.480	-9.133	1.00	15.33	BDNA	N
ATOM	4693	C5	ADE	114	72.008	4.314	-6.769	1.00	15.37	BDNA	C
ATOM	4694	N7	ADE	114	70.985	3.389	-6.653	1.00	15.65	BDNA	N
ATOM	4695	C8	ADE	114	70.805	3.280	-5.358	1.00	15.82	BDNA	C
ATOM	4696	C2'	ADE	114	70.701	4.377	-2.283	1.00	15.89	BDNA	C
ATOM	4697	C5'	ADE	114	70.754	1.130	-1.690	1.00	20.92	BDNA	C
ATOM	4698	C4'	ADE	114	71.663	2.322	-1.577	1.00	18.68	BDNA	C
ATOM	4699	O4'	ADE	114	72.204	2.687	-2.857	1.00	17.33	BDNA	O
ATOM	4700	C1'	ADE	114	71.868	4.022	-3.175	1.00	15.81	BDNA	C
ATOM	4701	C3'	ADE	114	71.026	3.579	-1.027	1.00	18.90	BDNA	C
ATOM	4702	O3'	ADE	114	72.046	4.171	-0.242	1.00	21.39	BDNA	O
ATOM	4703	P	GUA	115	71.690	5.349	0.781	1.00	25.58	BDNA	P
ATOM	4704	O1P	GUA	115	72.105	4.858	2.129	1.00	25.24	BDNA	O
ATOM	4705	O2P	GUA	115	70.281	5.796	0.565	1.00	23.48	BDNA	O
ATOM	4706	O5'	GUA	115	72.674	6.504	0.270	1.00	23.72	BDNA	O
ATOM	4707	N9	GUA	115	72.777	8.409	-4.323	1.00	13.20	BDNA	N
ATOM	4708	C4	GUA	115	72.802	8.522	-5.678	1.00	12.45	BDNA	C
ATOM	4709	N3	GUA	115	73.763	9.116	-6.401	1.00	14.15	BDNA	N
ATOM	4710	C2	GUA	115	73.505	9.053	-7.697	1.00	15.40	BDNA	C
ATOM	4711	N2	GUA	115	74.349	9.597	-8.584	1.00	18.26	BDNA	N
ATOM	4712	N1	GUA	115	72.397	8.453	-8.227	1.00	14.80	BDNA	N
ATOM	4713	C6	GUA	115	71.399	7.837	-7.487	1.00	13.51	BDNA	C
ATOM	4714	O6	GUA	115	70.437	7.325	-8.054	1.00	15.74	BDNA	O
ATOM	4715	C5	GUA	115	71.660	7.898	-6.118	1.00	11.99	BDNA	C
ATOM	4716	N7	GUA	115	70.929	7.403	-5.056	1.00	11.58	BDNA	N
ATOM	4717	C8	GUA	115	71.630	7.731	-4.010	1.00	12.90	BDNA	C
ATOM	4718	C2'	GUA	115	73.061	9.655	-2.267	1.00	12.69	BDNA	C
ATOM	4719	C5'	GUA	115	72.931	6.664	-1.141	1.00	18.97	BDNA	C
ATOM	4720	C4'	GUA	115	74.034	7.672	-1.375	1.00	15.48	BDNA	C
ATOM	4721	O4'	GUA	115	74.329	7.730	-2.784	1.00	14.69	BDNA	O
ATOM	4722	C1'	GUA	115	73.757	8.890	-3.373	1.00	13.37	BDNA	C
ATOM	4723	C3'	GUA	115	73.654	9.093	-0.997	1.00	14.55	BDNA	C
ATOM	4724	O3'	GUA	115	74.808	9.842	-0.654	1.00	12.44	BDNA	O
ATOM	4725	P	URI	116	74.665	11.421	-0.426	1.00	12.17	BDNA	P
ATOM	4726	O1P	URI	116	75.655	11.751	0.626	1.00	11.45	BDNA	O
ATOM	4727	O2P	URI	116	73.215	11.772	-0.228	1.00	10.75	BDNA	O
ATOM	4728	O5'	URI	116	75.173	12.018	-1.803	1.00	12.34	BDNA	O
ATOM	4729	N1	URI	116	73.751	12.390	-5.374	1.00	13.51	BDNA	N
ATOM	4730	C6	URI	116	73.020	11.766	-4.396	1.00	15.58	BDNA	C
ATOM	4731	C2	URI	116	73.264	12.473	-6.671	1.00	11.27	BDNA	C
ATOM	4732	O2	URI	116	73.829	13.083	-7.561	1.00	9.20	BDNA	O

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ATOM	4733	N3	URI	116	72.073	11.829	-6.873	1.00	10.08	BDNA	N
ATOM	4734	C4	URI	116	71.325	11.178	-5.935	1.00	12.97	BDNA	C
ATOM	4735	O4	URI	116	70.363	10.520	-6.283	1.00	9.89	BDNA	O
ATOM	4736	C5	URI	116	71.846	11.204	-4.636	1.00	15.13	BDNA	C
ATOM	4737	I5	URI	116	70.633	10.774	-3.136	1.00	22.70	BDNA	I
ATOM	4738	C2'	URI	116	75.098	14.060	-4.001	1.00	13.95	BDNA	C
ATOM	4739	C5'	URI	116	76.446	11.643	-2.284	1.00	14.40	BDNA	C
ATOM	4740	C4'	URI	116	76.757	12.412	-3.538	1.00	14.15	BDNA	C
ATOM	4741	O4'	URI	116	75.912	11.927	-4.609	1.00	14.37	BDNA	O
ATOM	4742	C1'	URI	116	75.073	12.975	-5.084	1.00	14.48	BDNA	C
ATOM	4743	C3'	URI	116	76.490	13.911	-3.412	1.00	14.63	BDNA	C
ATOM	4744	O3'	URI	116	77.492	14.613	-4.166	1.00	15.00	BDNA	O
ATOM	4745	P	CYT	117	77.730	16.191	-3.938	1.00	14.66	BDNA	P
ATOM	4746	O1P	CYT	117	79.185	16.451	-4.150	1.00	12.92	BDNA	O
ATOM	4747	O2P	CYT	117	77.043	16.698	-2.710	1.00	12.71	BDNA	O
ATOM	4748	O5'	CYT	117	76.982	16.839	-5.172	1.00	15.50	BDNA	O
ATOM	4749	N1	CYT	117	72.687	16.272	-7.452	1.00	17.87	BDNA	N
ATOM	4750	C6	CYT	117	72.572	16.046	-6.110	1.00	17.13	BDNA	C
ATOM	4751	C2	CYT	117	71.762	15.751	-8.334	1.00	17.96	BDNA	C
ATOM	4752	O2	CYT	117	71.838	16.084	-9.515	1.00	19.54	BDNA	O
ATOM	4753	N3	CYT	117	70.814	14.903	-7.886	1.00	17.44	BDNA	N
ATOM	4754	C4	CYT	117	70.767	14.592	-6.589	1.00	18.11	BDNA	C
ATOM	4755	N4	CYT	117	69.876	13.662	-6.193	1.00	18.63	BDNA	N
ATOM	4756	C5	CYT	117	71.641	15.208	-5.636	1.00	18.17	BDNA	C
ATOM	4757	C2'	CYT	117	74.252	18.243	-7.202	1.00	17.78	BDNA	C
ATOM	4758	C5'	CYT	117	76.099	16.071	-5.958	1.00	15.97	BDNA	C
ATOM	4759	C4'	CYT	117	76.033	16.669	-7.334	1.00	16.52	BDNA	C
ATOM	4760	O4'	CYT	117	74.904	16.127	-8.043	1.00	18.80	BDNA	O
ATOM	4761	C1'	CYT	117	73.810	17.029	-8.007	1.00	18.22	BDNA	C
ATOM	4762	C3'	CYT	117	75.770	18.157	-7.264	1.00	18.20	BDNA	C
ATOM	4763	O3'	CYT	117	76.371	18.733	-8.419	1.00	20.30	BDNA	O
ATOM	4764	P	URI	118	75.815	20.112	-9.002	1.00	22.07	BDNA	P
ATOM	4765	O1P	URI	118	76.972	20.747	-9.687	1.00	22.39	BDNA	O
ATOM	4766	O2P	URI	118	75.067	20.872	-7.963	1.00	22.00	BDNA	O
ATOM	4767	O5'	URI	118	74.726	19.637	-10.056	1.00	22.30	BDNA	O
ATOM	4768	N1	URI	118	70.227	18.807	-10.242	1.00	25.24	BDNA	N
ATOM	4769	C6	URI	118	70.731	19.154	-9.031	1.00	25.83	BDNA	C
ATOM	4770	C2	URI	118	69.100	18.017	-10.359	1.00	27.06	BDNA	C
ATOM	4771	O2	URI	118	68.613	17.707	-11.437	1.00	27.07	BDNA	O
ATOM	4772	N3	URI	118	68.568	17.594	-9.162	1.00	27.51	BDNA	N
ATOM	4773	C4	URI	118	69.053	17.882	-7.898	1.00	27.29	BDNA	C
ATOM	4774	O4	URI	118	68.508	17.391	-6.901	1.00	23.38	BDNA	O
ATOM	4775	C5	URI	118	70.209	18.725	-7.891	1.00	27.20	BDNA	C
ATOM	4776	I5	URI	118	71.042	19.253	-6.170	1.00	34.82	BDNA	I
ATOM	4777	C2'	URI	118	70.848	20.743	-11.671	1.00	25.44	BDNA	C
ATOM	4778	C5'	URI	118	73.819	20.574	-10.579	1.00	23.25	BDNA	C
ATOM	4779	C4'	URI	118	73.102	19.990	-11.763	1.00	24.22	BDNA	C
ATOM	4780	O4'	URI	118	72.272	18.901	-11.314	1.00	22.98	BDNA	O
ATOM	4781	C1'	URI	118	70.899	19.243	-11.461	1.00	24.39	BDNA	C
ATOM	4782	C3'	URI	118	72.158	21.004	-12.388	1.00	26.44	BDNA	C
ATOM	4783	O3'	URI	118	72.066	20.720	-13.776	1.00	30.40	BDNA	O
ATOM	4784	P	URI	119	72.246	21.901	-14.839	1.00	33.34	BDNA	P
ATOM	4785	O1P	URI	119	71.996	21.260	-16.154	1.00	33.05	BDNA	O
ATOM	4786	O2P	URI	119	73.533	22.599	-14.586	1.00	33.64	BDNA	O
ATOM	4787	O5'	URI	119	71.052	22.899	-14.511	1.00	34.22	BDNA	O
ATOM	4788	N1	URI	119	66.935	21.202	-12.119	1.00	43.78	BDNA	N
ATOM	4789	C6	URI	119	67.958	21.740	-11.403	1.00	45.22	BDNA	C
ATOM	4790	C2	URI	119	65.817	20.708	-11.506	1.00	45.96	BDNA	C
ATOM	4791	O2	URI	119	64.879	20.237	-12.129	1.00	47.71	BDNA	O
ATOM	4792	N3	URI	119	65.835	20.785	-10.135	1.00	46.31	BDNA	N
ATOM	4793	C4	URI	119	66.842	21.305	-9.356	1.00	45.89	BDNA	C
ATOM	4794	O4	URI	119	66.764	21.235	-8.134	1.00	45.39	BDNA	O

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ATOM	4795	C5	URI	119	67.945	21.814	-10.086	1.00	46.16	BDNA	C
ATOM	4796	I5	URI	119	69.371	22.813	-9.150	1.00	49.14	BDNA	I
ATOM	4797	C2	URI	119	66.833	22.498	-14.229	1.00	41.64	BDNA	C
ATOM	4798	C5	URI	119	69.942	22.434	-13.773	1.00	37.37	BDNA	C
ATOM	4799	C4	URI	119	69.009	21.671	-14.681	1.00	39.54	BDNA	C
ATOM	4800	O4	URI	119	68.325	20.691	-13.885	1.00	40.81	BDNA	O
ATOM	4801	C1	URI	119	67.014	21.134	-13.577	1.00	41.89	BDNA	C
ATOM	4802	C3	URI	119	67.920	22.542	-15.287	1.00	41.45	BDNA	C
ATOM	4803	O3	URI	119	67.465	22.003	-16.535	1.00	42.06	BDNA	O
ATOM	4804	P	URI	120	66.309	22.768	-17.356	1.00	42.36	BDNA	P
ATOM	4805	O1P	URI	120	66.260	22.136	-18.700	1.00	42.61	BDNA	O
ATOM	4806	O2P	URI	120	66.548	24.230	-17.232	1.00	42.32	BDNA	O
ATOM	4807	O5	URI	120	64.966	22.399	-16.581	1.00	43.12	BDNA	O
ATOM	4808	N1	URI	120	62.995	22.704	-12.925	1.00	49.25	BDNA	N
ATOM	4809	C6	URI	120	64.077	23.529	-13.125	1.00	50.47	BDNA	C
ATOM	4810	C2	URI	120	62.550	22.409	-11.651	1.00	49.37	BDNA	C
ATOM	4811	O2	URI	120	61.567	21.725	-11.434	1.00	50.12	BDNA	O
ATOM	4812	N3	URI	120	63.300	22.951	-10.641	1.00	49.42	BDNA	N
ATOM	4813	C4	URI	120	64.410	23.755	-10.776	1.00	50.00	BDNA	C
ATOM	4814	O4	URI	120	64.978	24.169	-9.774	1.00	51.71	BDNA	O
ATOM	4815	C5	URI	120	64.784	24.042	-12.120	1.00	50.50	BDNA	C
ATOM	4816	I5	URI	120	66.420	25.149	-12.492	1.00	59.16	BDNA	I
ATOM	4817	C2	URI	120	62.063	22.990	-15.240	1.00	47.97	BDNA	C
ATOM	4818	C5	URI	120	64.490	21.056	-16.578	1.00	45.50	BDNA	C
ATOM	4819	C4	URI	120	63.108	20.972	-15.971	1.00	47.05	BDNA	C
ATOM	4820	O4	URI	120	63.153	21.044	-14.529	1.00	47.15	BDNA	O
ATOM	4821	C1	URI	120	62.303	22.076	-14.055	1.00	47.88	BDNA	C
ATOM	4822	C3	URI	120	62.109	22.032	-16.420	1.00	48.06	BDNA	C
ATOM	4823	O3	URI	120	60.853	21.385	-16.659	1.00	49.73	BDNA	O
ATOM	4824	P	URI	121	59.513	22.258	-16.850	1.00	51.17	BDNA	P
ATOM	4825	O1P	URI	121	58.629	21.477	-17.762	1.00	50.37	BDNA	O
ATOM	4826	O2P	URI	121	59.841	23.674	-17.178	1.00	51.46	BDNA	O
ATOM	4827	O5	URI	121	58.893	22.230	-15.388	1.00	50.73	BDNA	O
ATOM	4828	N1	URI	121	58.813	23.897	-11.819	1.00	49.35	BDNA	N
ATOM	4829	C6	URI	121	59.628	24.446	-12.770	1.00	49.22	BDNA	C
ATOM	4830	C2	URI	121	58.989	24.164	-10.480	1.00	48.93	BDNA	C
ATOM	4831	O2	URI	121	58.260	23.713	-9.605	1.00	48.32	BDNA	O
ATOM	4832	N3	URI	121	60.047	24.979	-10.199	1.00	49.16	BDNA	N
ATOM	4833	C4	URI	121	60.913	25.542	-11.098	1.00	49.79	BDNA	C
ATOM	4834	O4	URI	121	61.890	26.153	-10.678	1.00	52.91	BDNA	O
ATOM	4835	C5	URI	121	60.638	25.241	-12.467	1.00	49.66	BDNA	C
ATOM	4836	I5	URI	121	61.639	26.178	-13.920	1.00	55.09	BDNA	I
ATOM	4837	C2	URI	121	56.991	23.354	-13.461	1.00	50.95	BDNA	C
ATOM	4838	C5	URI	121	58.790	20.995	-14.695	1.00	50.99	BDNA	C
ATOM	4839	C4	URI	121	57.760	21.112	-13.604	1.00	51.38	BDNA	C
ATOM	4840	O4	URI	121	58.342	21.725	-12.439	1.00	50.49	BDNA	O
ATOM	4841	C1	URI	121	57.734	22.979	-12.189	1.00	50.01	BDNA	C
ATOM	4842	C3	URI	121	56.584	21.995	-13.992	1.00	51.28	BDNA	C
ATOM	4843	O3	URI	121	55.437	21.511	-13.317	1.00	53.46	BDNA	O
ATOM	4844	P	THY	122	54.038	22.254	-13.507	1.00	55.43	BDNA	P
ATOM	4845	O1P	THY	122	53.713	22.226	-14.957	1.00	55.43	BDNA	O
ATOM	4846	O2P	THY	122	54.125	23.553	-12.802	1.00	55.76	BDNA	O
ATOM	4847	O5	THY	122	53.025	21.330	-12.704	1.00	54.14	BDNA	O
ATOM	4848	N1	THY	122	54.930	24.657	-9.986	1.00	48.31	BDNA	N
ATOM	4849	C6	THY	122	55.080	25.146	-11.260	1.00	47.17	BDNA	C
ATOM	4850	C2	THY	122	55.661	25.162	-8.939	1.00	47.39	BDNA	C
ATOM	4851	O2	THY	122	55.559	24.745	-7.798	1.00	46.94	BDNA	O
ATOM	4852	N3	THY	122	56.524	26.174	-9.280	1.00	46.49	BDNA	N
ATOM	4853	C4	THY	122	56.727	26.705	-10.538	1.00	46.11	BDNA	C
ATOM	4854	O4	THY	122	57.545	27.605	-10.696	1.00	45.28	BDNA	O
ATOM	4855	C5	THY	122	55.929	26.122	-11.587	1.00	46.12	BDNA	C
ATOM	4856	C5A	THY	122	56.083	26.623	-12.986	1.00	45.66	BDNA	C

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## FIGURE 2

REMARK Form9-TTC. Coordinates of the crystal structure  
 REMARK human topoisomerase I (topo70) in covalent complex  
 REMARK with 22mer duplex DNA and the anti-cancer compound  
 REMARK topotecan.

REMARK 3  
 REMARK 3  
 REMARK 3 REFINEMENT.  
 REMARK 3 PROGRAM : CNX 2000.1  
 REMARK 3 Molecular Simulations Inc.,  
 REMARK 3 (Badger, Berard, Kumar, Szalma,  
 REMARK 3 Yip).  
 REMARK 3

REMARK 3 DATA USED IN REFINEMENT.  
 REMARK 3 RESOLUTION RANGE HIGH (ANGSTROMS) : 2.00  
 REMARK 3 RESOLUTION RANGE LOW (ANGSTROMS) : 19.89  
 REMARK 3 DATA CUTOFF (SIGMA(F)) : 0.0  
 REMARK 3 DATA CUTOFF HIGH (ABS(F)) : 685622.37  
 REMARK 3 DATA CUTOFF LOW (ABS(F)) : 0.000000  
 REMARK 3 COMPLETENESS (WORKING+TEST) (%) : 72.5  
 REMARK 3 NUMBER OF REFLECTIONS : 47853  
 REMARK 3

REMARK 3 FIT TO DATA USED IN REFINEMENT.  
 REMARK 3 CROSS-VALIDATION METHOD : THROUGHOUT  
 REMARK 3 FREE R VALUE TEST SET SELECTION : RANDOM  
 REMARK 3 R VALUE (WORKING SET) : 0.233  
 REMARK 3 FREE R VALUE : 0.274  
 REMARK 3 FREE R VALUE TEST SET SIZE (%) : 9.5  
 REMARK 3 FREE R VALUE TEST SET COUNT : 4557  
 REMARK 3 ESTIMATED ERROR OF FREE R VALUE : 0.004  
 REMARK 3

REMARK 3 FIT IN THE HIGHEST RESOLUTION BIN.  
 REMARK 3 TOTAL NUMBER OF BINS USED : 6  
 REMARK 3 BIN RESOLUTION RANGE HIGH (A) : 2.00  
 REMARK 3 BIN RESOLUTION RANGE LOW (A) : 2.13  
 REMARK 3 BIN COMPLETENESS (WORKING+TEST) (%) : 26.1  
 REMARK 3 REFLECTIONS IN BIN (WORKING SET) : 2612  
 REMARK 3 BIN R VALUE (WORKING SET) : 0.319  
 REMARK 3 BIN FREE R VALUE : 0.372  
 REMARK 3 BIN FREE R VALUE TEST SET SIZE (%) : 8.6  
 REMARK 3 BIN FREE R VALUE TEST SET COUNT : 246  
 REMARK 3 ESTIMATED ERROR OF BIN FREE R VALUE : 0.024  
 REMARK 3

REMARK 3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.  
 REMARK 3 PROTEIN ATOMS : 4685  
 REMARK 3 NUCLEIC ACID ATOMS : 892  
 REMARK 3 HETEROGEN ATOMS : 31  
 REMARK 3 SOLVENT ATOMS : 235  
 REMARK 3

REMARK 3 B VALUES.  
 REMARK 3 FROM WILSON PLOT (A\*\*2) : 15.5  
 REMARK 3 MEAN B VALUE (OVERALL, A\*\*2) : 39.8  
 REMARK 3 OVERALL ANISOTROPIC B VALUE.  
 REMARK 3 B11 (A\*\*2) : -2.79  
 REMARK 3 B22 (A\*\*2) : -1.94  
 REMARK 3 B33 (A\*\*2) : 4.73  
 REMARK 3 B12 (A\*\*2) : 0.00  
 REMARK 3 B13 (A\*\*2) : 1.59  
 REMARK 3 B23 (A\*\*2) : 0.00  
 REMARK 3

REMARK 3 BULK SOLVENT MODELING.  
 REMARK 3 METHOD USED : FLAT MODEL  
 REMARK 3 KSOL : 0.299894  
 REMARK 3 BSOL : 22.4605 (A\*\*2)  
 REMARK 3

REMARK 3 ESTIMATED COORDINATE ERROR.  
 REMARK 3 ESD FROM LUZZATI PLOT (A) : 0.30  
 REMARK 3 ESD FROM SIGMAA (A) : 0.31  
 REMARK 3 LOW RESOLUTION CUTOFF (A) : 5.00  
 REMARK 3

REMARK 3 CROSS-VALIDATED ESTIMATED COORDINATE ERROR.  
 REMARK 3 ESD FROM C-V LUZZATI PLOT (A) : 0.36  
 REMARK 3 ESD FROM C-V SIGMAA (A) : 0.35  
 REMARK 3

REMARK 3 RMS DEVIATIONS FROM IDEAL VALUES.

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REMARK 3 BOND LENGTHS (A) : 0.006
REMARK 3 BOND ANGLES (DEGREES) : 1.2
REMARK 3 DIHEDRAL ANGLES (DEGREES) : 21.2
REMARK 3 IMPROPER ANGLES (DEGREES) : 3.60
REMARK 3
REMARK 3 ISOTROPIC THERMAL MODEL : RESTRAINED
REMARK 3
REMARK 3 ISOTROPIC THERMAL FACTOR RESTRAINTS. RMS SIGMA
REMARK 3 MAIN-CHAIN BOND (A**2) : NULL ; NULL
REMARK 3 MAIN-CHAIN ANGLE (A**2) : NULL ; NULL
REMARK 3 SIDE-CHAIN BOND (A**2) : NULL ; NULL
REMARK 3 SIDE-CHAIN ANGLE (A**2) : NULL ; NULL
REMARK 3
REMARK 3 NCS MODEL : NONE
REMARK 3
REMARK 3 NCS RESTRAINTS. RMS SIGMA/WEIGHT
REMARK 3 GROUP 1 POSITIONAL (A) : NULL ; NULL
REMARK 3 GROUP 1 B-FACTOR (A**2) : NULL ; NULL
REMARK 3
REMARK 3 PARAMETER FILE 1 : protein.param
REMARK 3 PARAMETER FILE 2 : dna-rna.param
REMARK 3 PARAMETER FILE 3 : ttc4/TTC_par.par
REMARK 3 PARAMETER FILE 4 : MSI_CNX_TOPPAR/water.param
REMARK 3 PARAMETER FILE 5 : MSI_CNX_TOPPAR/ion.param
REMARK 3 TOPOLOGY FILE 1 : protein.top
REMARK 3 TOPOLOGY FILE 2 : dna-rna.top
REMARK 3 TOPOLOGY FILE 3 : ttc4/TTC_top.top
REMARK 3 TOPOLOGY FILE 4 : MSI_CNX_TOPPAR/water.top
REMARK 3 TOPOLOGY FILE 5 : MSI_CNX_TOPPAR/ion.top
REMARK 3
REMARK 3 OTHER REFINEMENT REMARKS: NULL
CRYST1 57.093 116.260 75.217 90.00 94.16 90.00 P 21 0
ORIGX1 1.000000 0.000000 0.000000 0.000000
ORIGX2 0.000000 1.000000 0.000000 0.000000
ORIGX3 0.000000 0.000000 1.000000 0.000000
SCALE1 0.017515 0.000000 0.001273 0.000000
SCALE2 0.000000 0.008601 0.000000 0.000000
SCALE3 0.000000 0.000000 0.013330 0.000000
REMARK coordinates from restrained individual B-factor refinement
REMARK refinement resolution: 30.0 - 2.0 A
REMARK starting r= 0.2366 free_r= 0.2768
REMARK final r= 0.2336 free_r= 0.2745
REMARK B rmsd for bonded mainchain atoms= 1.853 target= 1.5
REMARK B rmsd for bonded sidechain atoms= 2.976 target= 2.0
REMARK B rmsd for angle mainchain atoms= 2.900 target= 2.0
REMARK B rmsd for angle sidechain atoms= 4.614 target= 2.5
REMARK wa= 2.57486
REMARK rweight=7E-02
REMARK target= mlf steps= 30
REMARK sg= P2(1) a= 57.093 b= 116.260 c= 75.217 alpha= 90 beta= 94.156 gamma= 90
REMARK parameter file 1 : protein.param
REMARK parameter file 2 : dna-rna.param
REMARK parameter file 3 : ttc4/TTC_par.par
REMARK parameter file 4 : MSI_CNX_TOPPAR:water.param
REMARK parameter file 5 : MSI_CNX_TOPPAR:ion.param
REMARK molecular structure file: generate.mtf
REMARK input coordinates: minimize.pdb
REMARK reflection file= T70_f9_181hgp.cv
REMARK ncs= none
REMARK B-correction resolution: 6.0 - 2.0
REMARK initial B-factor correction applied to fobs :
REMARK B11= 2.844 B22= 2.056 B33= -4.899
REMARK B12= 0.000 B13= -1.602 B23= 0.000
REMARK B-factor correction applied to coordinate array B: 0.248
REMARK bulk solvent: (Mask) density level= 0.300388 e/A^3, B-factor= 21.9875 A^2
REMARK reflections with |Fobs|/sigma_F < 0.0 rejected
REMARK reflections with |Fobs| > 10000 * rms(Fobs) rejected
REMARK theoretical total number of refl. in resol. range: 65994 ( 100.0 %)
REMARK number of unobserved reflections (no entry or |F|=0): 18141 ( 27.5 %)
REMARK number of reflections rejected: 0 ( 0.0 %)
REMARK total number of reflections used: 47853 ( 72.5 %)
REMARK number of reflections in working set: 43296 ( 65.6 %)
REMARK number of reflections in test set: 4557 ( 6.9 %)
REMARK FILENAME="bindividual.pdb"
REMARK DATE:Aug-10-2001 00:02:11 created by user: bart
REMARK Written by CNX VERSION:2000.12

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ATOM	1	CB	ALA	201	49.305	-10.564	35.982	1.00	54.47	A	C
ATOM	2	C	ALA	201	49.439	-8.113	36.517	1.00	51.03	A	C
ATOM	3	O	ALA	201	50.324	-7.255	36.516	1.00	51.77	A	O
ATOM	4	N	ALA	201	49.061	-9.799	38.334	1.00	52.57	A	N
ATOM	5	CA	ALA	201	49.731	-9.526	37.025	1.00	52.92	A	C
ATOM	6	N	ALA	202	48.192	-7.882	36.102	1.00	48.09	A	N
ATOM	7	CA	ALA	202	47.739	-6.591	35.581	1.00	43.16	A	C
ATOM	8	CB	ALA	202	47.840	-5.506	36.655	1.00	46.88	A	C
ATOM	9	C	ALA	202	48.480	-6.165	34.311	1.00	41.02	A	C
ATOM	10	O	ALA	202	49.602	-5.651	34.363	1.00	40.49	A	O
ATOM	11	N	TRP	203	47.842	-6.403	33.169	1.00	35.68	A	N
ATOM	12	CA	TRP	203	48.407	-6.051	31.878	1.00	29.98	A	C
ATOM	13	CB	TRP	203	48.030	-7.105	30.835	1.00	26.52	A	C
ATOM	14	CG	TRP	203	48.379	-6.729	29.423	1.00	21.41	A	C
ATOM	15	CD2	TRP	203	47.583	-6.964	28.254	1.00	20.02	A	C
ATOM	16	CE2	TRP	203	48.325	-6.504	27.146	1.00	17.84	A	C
ATOM	17	CE3	TRP	203	46.311	-7.519	28.037	1.00	18.87	A	C
ATOM	18	CD1	TRP	203	49.530	-6.145	28.992	1.00	17.97	A	C
ATOM	19	NE1	TRP	203	49.509	-6.010	27.627	1.00	17.32	A	N
ATOM	20	CZ2	TRP	203	47.844	-6.582	25.833	1.00	17.83	A	C
ATOM	21	CZ3	TRP	203	45.831	-7.596	26.737	1.00	19.19	A	C
ATOM	22	CH2	TRP	203	46.601	-7.128	25.645	1.00	18.66	A	C
ATOM	23	C	TRP	203	47.918	-4.683	31.422	1.00	27.49	A	C
ATOM	24	O	TRP	203	46.723	-4.466	31.265	1.00	28.13	A	O
ATOM	25	N	LYS	204	48.855	-3.768	31.206	1.00	25.77	A	N
ATOM	26	CA	LYS	204	48.530	-2.420	30.749	1.00	24.51	A	C
ATOM	27	CB	LYS	204	49.553	-1.424	31.299	1.00	27.86	A	C
ATOM	28	CG	LYS	204	49.668	-1.456	32.806	1.00	30.85	A	C
ATOM	29	CD	LYS	204	50.621	-0.398	33.324	1.00	35.32	A	C
ATOM	30	CE	LYS	204	50.735	-0.489	34.839	1.00	36.29	A	C
ATOM	31	NZ	LYS	204	51.537	0.620	35.411	1.00	43.16	A	N
ATOM	32	C	LYS	204	48.550	-2.416	29.223	1.00	22.57	A	C
ATOM	33	O	LYS	204	49.546	-2.032	28.610	1.00	20.40	A	O
ATOM	34	N	TRP	205	47.464	-2.889	28.616	1.00	18.96	A	N
ATOM	35	CA	TRP	205	47.369	-2.954	27.157	1.00	20.89	A	C
ATOM	36	CB	TRP	205	46.079	-3.672	26.735	1.00	21.39	A	C
ATOM	37	CG	TRP	205	44.824	-3.057	27.299	1.00	22.97	A	C
ATOM	38	CD2	TRP	205	44.143	-1.900	26.808	1.00	17.69	A	C
ATOM	39	CE2	TRP	205	43.028	-1.683	27.650	1.00	20.06	A	C
ATOM	40	CE3	TRP	205	44.366	-1.021	25.739	1.00	18.41	A	C
ATOM	41	CD1	TRP	205	44.111	-3.492	28.388	1.00	22.12	A	C
ATOM	42	NE1	TRP	205	43.031	-2.670	28.600	1.00	21.27	A	N
ATOM	43	CZ2	TRP	205	42.135	-0.618	27.456	1.00	17.44	A	C
ATOM	44	CZ3	TRP	205	43.477	0.039	25.544	1.00	17.95	A	C
ATOM	45	CH2	TRP	205	42.377	0.225	26.403	1.00	16.71	A	C
ATOM	46	C	TRP	205	47.457	-1.591	26.469	1.00	19.52	A	C
ATOM	47	O	TRP	205	47.827	-1.499	25.303	1.00	19.62	A	O
ATOM	48	N	TRP	206	47.119	-0.533	27.195	1.00	21.98	A	N
ATOM	49	CA	TRP	206	47.151	0.821	26.639	1.00	23.43	A	C
ATOM	50	CB	TRP	206	46.406	1.799	27.557	1.00	22.26	A	C
ATOM	51	CG	TRP	206	46.802	1.700	28.985	1.00	16.11	A	C
ATOM	52	CD2	TRP	206	46.216	0.858	29.978	1.00	15.49	A	C
ATOM	53	CE2	TRP	206	46.887	1.112	31.189	1.00	17.78	A	C
ATOM	54	CE3	TRP	206	45.186	-0.091	29.962	1.00	15.61	A	C
ATOM	55	CD1	TRP	206	47.781	2.408	29.610	1.00	18.37	A	C
ATOM	56	NE1	TRP	206	47.838	2.063	30.938	1.00	17.57	A	N
ATOM	57	CZ2	TRP	206	46.564	0.451	32.375	1.00	16.69	A	C
ATOM	58	CZ3	TRP	206	44.865	-0.747	31.140	1.00	14.89	A	C
ATOM	59	CH2	TRP	206	45.553	-0.472	32.331	1.00	17.35	A	C
ATOM	60	C	TRP	206	48.562	1.327	26.367	1.00	24.94	A	C
ATOM	61	O	TRP	206	48.741	2.378	25.760	1.00	25.01	A	O
ATOM	62	N	GLU	207	49.557	0.587	26.843	1.00	28.37	A	N
ATOM	63	CA	GLU	207	50.948	0.961	26.631	1.00	32.95	A	C
ATOM	64	CB	GLU	207	51.793	0.651	27.869	1.00	35.01	A	C
ATOM	65	CG	GLU	207	51.272	1.322	29.126	1.00	41.76	A	C
ATOM	66	CD	GLU	207	52.341	1.535	30.178	1.00	46.66	A	C
ATOM	67	OE1	GLU	207	53.178	0.627	30.393	1.00	49.52	A	O
ATOM	68	OE2	GLU	207	52.341	2.623	30.795	1.00	49.11	A	O
ATOM	69	C	GLU	207	51.505	0.232	25.422	1.00	32.70	A	C
ATOM	70	O	GLU	207	52.579	0.566	24.935	1.00	32.92	A	O
ATOM	71	N	GLU	208	50.760	-0.758	24.939	1.00	31.85	A	N
ATOM	72	CA	GLU	208	51.165	-1.533	23.775	1.00	33.58	A	C
ATOM	73	CB	GLU	208	50.331	-2.817	23.656	1.00	33.58	A	C
ATOM	74	CG	GLU	208	50.362	-3.743	24.884	1.00	32.64	A	C
ATOM	75	CD	GLU	208	51.688	-4.467	25.059	1.00	32.20	A	C
ATOM	76	OE1	GLU	208	52.539	-4.393	24.142	1.00	34.45	A	O

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ATOM	77	OE2	GLU	208	51.877	-5.112	26.115	1.00	23.57	A	O
ATOM	78	C	GLU	208	50.974	-0.711	22.509	1.00	36.17	A	C
ATOM	79	O	GLU	208	50.346	0.349	22.521	1.00	33.78	A	O
ATOM	80	N	GLU	209	51.540	-1.211	21.419	1.00	40.96	A	N
ATOM	81	CA	GLU	209	51.436	-0.571	20.120	1.00	45.50	A	C
ATOM	82	CB	GLU	209	52.453	-1.202	19.159	1.00	49.48	A	C
ATOM	83	CG	GLU	209	52.622	-0.479	17.829	1.00	55.87	A	C
ATOM	84	CD	GLU	209	53.646	-1.147	16.921	1.00	60.17	A	C
ATOM	85	OE1	GLU	209	53.376	-1.269	15.706	1.00	62.77	A	O
ATOM	86	OE2	GLU	209	54.724	-1.551	17.415	1.00	63.61	A	O
ATOM	87	C	GLU	209	50.015	-0.852	19.650	1.00	46.92	A	C
ATOM	88	O	GLU	209	49.565	-2.002	19.694	1.00	45.89	A	O
ATOM	89	N	ARG	210	49.305	0.201	19.242	1.00	48.79	A	N
ATOM	90	CA	ARG	210	47.922	0.082	18.771	1.00	50.74	A	C
ATOM	91	CB	ARG	210	47.458	1.380	18.102	1.00	52.65	A	C
ATOM	92	CG	ARG	210	46.881	2.405	19.073	1.00	59.27	A	C
ATOM	93	CD	ARG	210	45.422	2.766	18.742	1.00	61.84	A	C
ATOM	94	NE	ARG	210	45.291	3.626	17.561	1.00	63.43	A	N
ATOM	95	CZ	ARG	210	45.049	3.190	16.325	1.00	64.35	A	C
ATOM	96	NH1	ARG	210	44.945	4.056	15.326	1.00	65.21	A	N
ATOM	97	NH2	ARG	210	44.918	1.892	16.079	1.00	63.81	A	N
ATOM	98	C	ARG	210	47.700	-1.093	17.823	1.00	50.06	A	C
ATOM	99	O	ARG	210	48.473	-1.306	16.883	1.00	46.44	A	O
ATOM	100	N	TYR	211	46.642	-1.854	18.089	1.00	50.42	A	N
ATOM	101	CA	TYR	211	46.305	-3.014	17.275	1.00	53.19	A	C
ATOM	102	CB	TYR	211	45.164	-3.814	17.921	1.00	53.86	A	C
ATOM	103	CG	TYR	211	45.400	-5.309	17.875	1.00	57.04	A	C
ATOM	104	CD1	TYR	211	44.927	-6.080	16.813	1.00	56.95	A	C
ATOM	105	CE1	TYR	211	45.217	-7.441	16.727	1.00	58.30	A	C
ATOM	106	CD2	TYR	211	46.162	-5.942	18.859	1.00	57.51	A	C
ATOM	107	CE2	TYR	211	46.454	-7.301	18.783	1.00	57.66	A	C
ATOM	108	CZ	TYR	211	45.983	-8.042	17.713	1.00	58.43	A	C
ATOM	109	OH	TYR	211	46.306	-9.377	17.610	1.00	59.45	A	O
ATOM	110	C	TYR	211	45.941	-2.594	15.850	1.00	54.32	A	C
ATOM	111	O	TYR	211	45.111	-1.706	15.650	1.00	54.07	A	O
ATOM	112	N	PRO	212	46.582	-3.217	14.844	1.00	56.09	A	N
ATOM	113	CD	PRO	212	47.607	-4.254	15.075	1.00	57.26	A	C
ATOM	114	CA	PRO	212	46.403	-2.981	13.402	1.00	58.21	A	C
ATOM	115	CB	PRO	212	47.165	-4.147	12.772	1.00	58.08	A	C
ATOM	116	CG	PRO	212	48.295	-4.345	13.727	1.00	59.24	A	C
ATOM	117	C	PRO	212	44.960	-2.941	12.901	1.00	59.43	A	C
ATOM	118	O	PRO	212	44.013	-3.158	13.655	1.00	60.81	A	O
ATOM	119	N	GLU	213	44.815	-2.672	11.608	1.00	60.63	A	N
ATOM	120	CA	GLU	213	43.512	-2.589	10.954	1.00	61.21	A	C
ATOM	121	CB	GLU	213	43.588	-1.578	9.798	1.00	64.85	A	C
ATOM	122	CG	GLU	213	42.299	-0.803	9.496	1.00	68.57	A	C
ATOM	123	CD	GLU	213	41.208	-1.652	8.854	1.00	71.19	A	C
ATOM	124	OE1	GLU	213	40.144	-1.834	9.489	1.00	71.72	A	O
ATOM	125	OE2	GLU	213	41.407	-2.126	7.712	1.00	72.19	A	O
ATOM	126	C	GLU	213	43.117	-3.967	10.417	1.00	59.50	A	C
ATOM	127	O	GLU	213	43.981	-4.786	10.076	1.00	60.37	A	O
ATOM	128	N	GLY	214	41.811	-4.219	10.362	1.00	56.48	A	N
ATOM	129	CA	GLY	214	41.307	-5.483	9.852	1.00	51.95	A	C
ATOM	130	C	GLY	214	41.233	-6.610	10.864	1.00	48.83	A	C
ATOM	131	O	GLY	214	40.155	-6.922	11.376	1.00	47.74	A	O
ATOM	132	N	ILE	215	42.377	-7.236	11.127	1.00	45.70	A	N
ATOM	133	CA	ILE	215	42.463	-8.347	12.069	1.00	43.63	A	C
ATOM	134	CB	ILE	215	43.836	-9.056	11.948	1.00	45.64	A	C
ATOM	135	CG2	ILE	215	44.183	-9.812	13.225	1.00	47.67	A	C
ATOM	136	CG1	ILE	215	43.818	-9.995	10.740	1.00	46.84	A	C
ATOM	137	CD1	ILE	215	45.082	-10.835	10.575	1.00	51.94	A	C
ATOM	138	C	ILE	215	42.174	-7.945	13.518	1.00	40.84	A	C
ATOM	139	O	ILE	215	42.757	-6.999	14.039	1.00	40.97	A	O
ATOM	140	N	LYS	216	41.265	-8.677	14.158	1.00	36.34	A	N
ATOM	141	CA	LYS	216	40.876	-8.411	15.543	1.00	31.91	A	C
ATOM	142	CB	LYS	216	39.397	-8.750	15.740	1.00	32.44	A	C
ATOM	143	CG	LYS	216	38.455	-8.000	14.827	1.00	34.23	A	C
ATOM	144	CD	LYS	216	38.418	-6.526	15.176	1.00	36.91	A	C
ATOM	145	CE	LYS	216	37.446	-5.779	14.288	1.00	37.29	A	C
ATOM	146	NZ	LYS	216	37.297	-4.382	14.754	1.00	43.61	A	N
ATOM	147	C	LYS	216	41.711	-9.198	16.559	1.00	30.03	A	C
ATOM	148	O	LYS	216	41.833	-8.798	17.716	1.00	26.71	A	O
ATOM	149	N	TRP	217	42.248	-10.337	16.127	1.00	26.13	A	N
ATOM	150	CA	TRP	217	43.061	-11.191	16.990	1.00	24.81	A	C
ATOM	151	CB	TRP	217	42.182	-11.921	18.027	1.00	23.82	A	C
ATOM	152	CG	TRP	217	40.968	-12.618	17.450	1.00	22.90	A	C

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ATOM	153	CD2	TRP	217	40.930	-13.889	16.774	1.00	22.18	A	C
ATOM	154	CE2	TRP	217	39.587	-14.130	16.413	1.00	22.14	A	C
ATOM	155	CE3	TRP	217	41.897	-14.840	16.440	1.00	23.14	A	C
ATOM	156	CD1	TRP	217	39.685	-12.162	17.466	1.00	23.44	A	C
ATOM	157	NE1	TRP	217	38.851	-13.063	16.844	1.00	20.11	A	N
ATOM	158	CZ2	TRP	217	39.187	-15.286	15.734	1.00	22.55	A	C
ATOM	159	CZ3	TRP	217	41.499	-15.994	15.760	1.00	26.78	A	C
ATOM	160	CH2	TRP	217	40.153	-16.203	15.416	1.00	23.37	A	C
ATOM	161	C	TRP	217	43.827	-12.206	16.149	1.00	24.60	A	C
ATOM	162	O	TRP	217	43.520	-12.403	14.972	1.00	25.24	A	O
ATOM	163	N	LYS	218	44.820	-12.849	16.756	1.00	24.35	A	N
ATOM	164	CA	LYS	218	45.628	-13.855	16.062	1.00	26.61	A	C
ATOM	165	CB	LYS	218	47.119	-13.495	16.159	1.00	29.04	A	C
ATOM	166	CG	LYS	218	47.451	-12.104	15.614	1.00	37.71	A	C
ATOM	167	CD	LYS	218	48.874	-11.678	15.953	1.00	45.19	A	C
ATOM	168	CE	LYS	218	49.064	-11.535	17.462	1.00	49.06	A	C
ATOM	169	NZ	LYS	218	50.502	-11.406	17.857	1.00	51.67	A	N
ATOM	170	C	LYS	218	45.373	-15.225	16.685	1.00	24.32	A	C
ATOM	171	O	LYS	218	45.375	-16.243	16.001	1.00	28.07	A	O
ATOM	172	N	PHE	219	45.153	-15.231	17.995	1.00	22.41	A	N
ATOM	173	CA	PHE	219	44.879	-16.448	18.738	1.00	20.63	A	C
ATOM	174	CB	PHE	219	46.072	-16.814	19.627	1.00	18.93	A	C
ATOM	175	CG	PHE	219	45.908	-18.121	20.340	1.00	21.80	A	C
ATOM	176	CD1	PHE	219	46.185	-19.321	19.684	1.00	20.14	A	C
ATOM	177	CD2	PHE	219	45.432	-18.161	21.648	1.00	20.77	A	C
ATOM	178	CE1	PHE	219	45.987	-20.546	20.317	1.00	19.29	A	C
ATOM	179	CE2	PHE	219	45.226	-19.378	22.296	1.00	22.61	A	C
ATOM	180	CZ	PHE	219	45.504	-20.575	21.627	1.00	22.09	A	C
ATOM	181	C	PHE	219	43.625	-16.254	19.593	1.00	20.61	A	C
ATOM	182	O	PHE	219	43.414	-15.186	20.167	1.00	20.10	A	O
ATOM	183	N	LEU	220	42.793	-17.289	19.668	1.00	20.70	A	N
ATOM	184	CA	LEU	220	41.565	-17.226	20.455	1.00	18.52	A	C
ATOM	185	CB	LEU	220	40.449	-16.568	19.643	1.00	19.23	A	C
ATOM	186	CG	LEU	220	39.108	-16.419	20.367	1.00	20.78	A	C
ATOM	187	CD1	LEU	220	39.307	-15.608	21.634	1.00	22.62	A	C
ATOM	188	CD2	LEU	220	38.093	-15.743	19.482	1.00	18.47	A	C
ATOM	189	C	LEU	220	41.114	-18.607	20.912	1.00	19.64	A	C
ATOM	190	O	LEU	220	40.833	-19.480	20.096	1.00	20.52	A	O
ATOM	191	N	GLU	221	41.043	-18.799	22.221	1.00	19.71	A	N
ATOM	192	CA	GLU	221	40.612	-20.067	22.772	1.00	19.62	A	C
ATOM	193	CB	GLU	221	41.818	-20.899	23.212	1.00	20.89	A	C
ATOM	194	CG	GLU	221	41.450	-22.301	23.663	1.00	24.73	A	C
ATOM	195	CD	GLU	221	42.655	-23.122	24.091	1.00	31.59	A	C
ATOM	196	OE1	GLU	221	43.507	-23.435	23.228	1.00	28.58	A	O
ATOM	197	OE2	GLU	221	42.742	-23.454	25.294	1.00	35.31	A	O
ATOM	198	C	GLU	221	39.703	-19.838	23.965	1.00	20.47	A	C
ATOM	199	O	GLU	221	40.009	-19.021	24.827	1.00	22.28	A	O
ATOM	200	N	HIS	222	38.601	-20.584	24.023	1.00	20.05	A	N
ATOM	201	CA	HIS	222	37.639	-20.494	25.127	1.00	18.83	A	C
ATOM	202	CB	HIS	222	36.659	-19.325	24.912	1.00	17.45	A	C
ATOM	203	CG	HIS	222	35.906	-19.401	23.619	1.00	17.90	A	C
ATOM	204	CD2	HIS	222	36.227	-18.974	22.374	1.00	19.09	A	C
ATOM	205	ND1	HIS	222	34.683	-20.027	23.506	1.00	19.66	A	N
ATOM	206	CE1	HIS	222	34.285	-19.987	22.246	1.00	17.69	A	C
ATOM	207	NE2	HIS	222	35.205	-19.355	21.538	1.00	16.41	A	N
ATOM	208	C	HIS	222	36.874	-21.812	25.241	1.00	19.36	A	C
ATOM	209	O	HIS	222	36.883	-22.629	24.320	1.00	19.67	A	O
ATOM	210	N	LYS	223	36.202	-22.009	26.366	1.00	22.38	A	N
ATOM	211	CA	LYS	223	35.445	-23.231	26.597	1.00	25.69	A	C
ATOM	212	CB	LYS	223	35.497	-23.599	28.080	1.00	28.75	A	C
ATOM	213	CG	LYS	223	36.858	-24.122	28.534	1.00	37.98	A	C
ATOM	214	CD	LYS	223	37.226	-25.421	27.816	1.00	44.37	A	C
ATOM	215	CE	LYS	223	38.571	-25.964	28.303	1.00	50.72	A	C
ATOM	216	NZ	LYS	223	38.974	-27.229	27.613	1.00	51.76	A	N
ATOM	217	C	LYS	223	33.998	-23.229	26.102	1.00	23.30	A	C
ATOM	218	O	LYS	223	33.274	-24.186	26.323	1.00	23.05	A	O
ATOM	219	N	GLY	224	33.583	-22.179	25.401	1.00	23.47	A	N
ATOM	220	CA	GLY	224	32.212	-22.136	24.918	1.00	20.90	A	C
ATOM	221	C	GLY	224	31.240	-21.666	25.991	1.00	19.55	A	C
ATOM	222	O	GLY	224	31.616	-21.553	27.147	1.00	21.75	A	O
ATOM	223	N	PRO	225	29.951	-21.511	25.665	1.00	20.81	A	N
ATOM	224	CD	PRO	225	29.307	-21.918	24.402	1.00	19.77	A	C
ATOM	225	CA	PRO	225	28.952	-21.049	26.633	1.00	20.13	A	C
ATOM	226	CB	PRO	225	27.778	-20.681	25.738	1.00	17.34	A	C
ATOM	227	CG	PRO	225	27.829	-21.769	24.716	1.00	20.53	A	C
ATOM	228	C	PRO	225	28.530	-22.054	27.698	1.00	18.53	A	C

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ATOM	229	O	PRO	225	28.861	-23.240	27.643	1.00	14.12	A	O
ATOM	230	N	VAL	226	27.849	-21.533	28.705	1.00	17.99	A	N
ATOM	231	CA	VAL	226	27.313	-22.349	29.789	1.00	20.87	A	C
ATOM	232	CB	VAL	226	27.619	-21.728	31.168	1.00	21.32	A	C
ATOM	233	CG1	VAL	226	26.706	-22.324	32.229	1.00	22.75	A	C
ATOM	234	CG2	VAL	226	29.077	-21.974	31.537	1.00	20.48	A	C
ATOM	235	C	VAL	226	25.801	-22.375	29.563	1.00	20.38	A	C
ATOM	236	O	VAL	226	25.149	-21.334	29.562	1.00	18.04	A	O
ATOM	237	N	PHE	227	25.259	-23.558	29.309	1.00	21.60	A	N
ATOM	238	CA	PHE	227	23.829	-23.688	29.071	1.00	21.60	A	C
ATOM	239	CB	PHE	227	23.530	-24.934	28.225	1.00	20.07	A	C
ATOM	240	CG	PHE	227	24.101	-24.862	26.846	1.00	18.60	A	C
ATOM	241	CD1	PHE	227	23.425	-24.192	25.839	1.00	19.46	A	C
ATOM	242	CD2	PHE	227	25.356	-25.408	26.567	1.00	22.81	A	C
ATOM	243	CE1	PHE	227	23.988	-24.053	24.563	1.00	19.56	A	C
ATOM	244	CE2	PHE	227	25.932	-25.278	25.304	1.00	19.15	A	C
ATOM	245	CZ	PHE	227	25.248	-24.597	24.298	1.00	21.01	A	C
ATOM	246	C	PHE	227	23.037	-23.707	30.363	1.00	22.49	A	C
ATOM	247	O	PHE	227	23.524	-24.164	31.393	1.00	24.26	A	O
ATOM	248	N	ALA	228	21.822	-23.176	30.305	1.00	24.34	A	N
ATOM	249	CA	ALA	228	20.939	-23.142	31.463	1.00	24.83	A	C
ATOM	250	CB	ALA	228	19.687	-22.340	31.134	1.00	24.53	A	C
ATOM	251	C	ALA	228	20.571	-24.577	31.830	1.00	25.81	A	C
ATOM	252	O	ALA	228	20.475	-25.437	30.949	1.00	24.52	A	O
ATOM	253	N	PRO	229	20.406	-24.865	33.139	1.00	26.70	A	N
ATOM	254	CD	PRO	229	20.418	-23.905	34.257	1.00	28.09	A	C
ATOM	255	CA	PRO	229	20.049	-26.210	33.616	1.00	28.48	A	C
ATOM	256	CB	PRO	229	19.903	-26.011	35.133	1.00	31.21	A	C
ATOM	257	CG	PRO	229	19.481	-24.568	35.246	1.00	29.49	A	C
ATOM	258	C	PRO	229	18.735	-26.654	32.992	1.00	26.76	A	C
ATOM	259	O	PRO	229	17.870	-25.828	32.707	1.00	26.14	A	O
ATOM	260	N	PRO	230	18.579	-27.959	32.749	1.00	27.21	A	N
ATOM	261	CD	PRO	230	19.508	-29.060	33.051	1.00	28.35	A	C
ATOM	262	CA	PRO	230	17.344	-28.468	32.145	1.00	28.40	A	C
ATOM	263	CB	PRO	230	17.620	-29.965	32.006	1.00	25.95	A	C
ATOM	264	CG	PRO	230	18.582	-30.244	33.098	1.00	27.47	A	C
ATOM	265	C	PRO	230	16.096	-28.184	32.975	1.00	29.20	A	C
ATOM	266	O	PRO	230	16.168	-27.957	34.184	1.00	29.93	A	O
ATOM	267	N	TYR	231	14.960	-28.113	32.299	1.00	29.10	A	N
ATOM	268	CA	TYR	231	13.696	-27.858	32.971	1.00	30.24	A	C
ATOM	269	CB	TYR	231	12.588	-27.656	31.944	1.00	27.61	A	C
ATOM	270	CG	TYR	231	11.219	-27.604	32.569	1.00	28.09	A	C
ATOM	271	CD1	TYR	231	10.820	-26.495	33.314	1.00	26.11	A	C
ATOM	272	CE1	TYR	231	9.559	-26.436	33.888	1.00	26.39	A	C
ATOM	273	CD2	TYR	231	10.319	-28.666	32.418	1.00	26.27	A	C
ATOM	274	CE2	TYR	231	9.053	-28.619	32.991	1.00	24.32	A	C
ATOM	275	CZ	TYR	231	8.681	-27.498	33.721	1.00	26.09	A	C
ATOM	276	OH	TYR	231	7.427	-27.411	34.264	1.00	29.47	A	O
ATOM	277	C	TYR	231	13.306	-29.020	33.887	1.00	30.44	A	C
ATOM	278	O	TYR	231	13.261	-30.164	33.445	1.00	28.77	A	O
ATOM	279	N	GLU	232	12.970	-28.691	35.132	1.00	31.65	A	N
ATOM	280	CA	GLU	232	12.552	-29.660	36.148	1.00	37.56	A	C
ATOM	281	CB	GLU	232	13.096	-29.243	37.521	1.00	43.12	A	C
ATOM	282	CG	GLU	232	14.471	-28.583	37.506	1.00	51.47	A	C
ATOM	283	CD	GLU	232	15.621	-29.577	37.456	1.00	53.68	A	C
ATOM	284	OE1	GLU	232	16.352	-29.685	38.471	1.00	52.03	A	O
ATOM	285	OE2	GLU	232	15.802	-30.231	36.402	1.00	56.48	A	O
ATOM	286	C	GLU	232	11.020	-29.650	36.234	1.00	35.93	A	C
ATOM	287	O	GLU	232	10.424	-28.649	36.640	1.00	34.34	A	O
ATOM	288	N	PRO	233	10.362	-30.756	35.858	1.00	35.20	A	N
ATOM	289	CD	PRO	233	10.903	-31.946	35.182	1.00	34.47	A	C
ATOM	290	CA	PRO	233	8.894	-30.813	35.918	1.00	34.03	A	C
ATOM	291	CB	PRO	233	8.589	-32.216	35.399	1.00	35.09	A	C
ATOM	292	CG	PRO	233	9.701	-32.442	34.409	1.00	34.88	A	C
ATOM	293	C	PRO	233	8.330	-30.582	37.321	1.00	33.37	A	C
ATOM	294	O	PRO	233	8.992	-30.855	38.326	1.00	32.96	A	O
ATOM	295	N	LEU	234	7.121	-30.028	37.377	1.00	32.91	A	N
ATOM	296	CA	LEU	234	6.456	-29.732	38.646	1.00	30.68	A	C
ATOM	297	CB	LEU	234	5.137	-29.001	38.386	1.00	33.02	A	C
ATOM	298	CG	LEU	234	5.231	-27.580	37.828	1.00	34.73	A	C
ATOM	299	CD1	LEU	234	3.919	-27.159	37.189	1.00	34.97	A	C
ATOM	300	CD2	LEU	234	5.627	-26.644	38.931	1.00	32.98	A	C
ATOM	301	C	LEU	234	6.171	-30.981	39.473	1.00	29.31	A	C
ATOM	302	O	LEU	234	5.962	-32.066	38.926	1.00	27.60	A	O
ATOM	303	N	PRO	235	6.201	-30.851	40.807	1.00	30.69	A	N
ATOM	304	CD	PRO	235	6.527	-29.663	41.617	1.00	31.53	A	C

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ATOM	305	CA	PRO	235	5.925	-32.006	41.665	1.00	32.89	A	C
ATOM	306	CB	PRO	235	6.223	-31.475	43.063	1.00	30.02	A	C
ATOM	307	CG	PRO	235	5.911	-30.017	42.950	1.00	32.75	A	C
ATOM	308	C	PRO	235	4.465	-32.417	41.505	1.00	34.94	A	C
ATOM	309	O	PRO	235	3.629	-31.630	41.056	1.00	36.64	A	O
ATOM	310	N	GLU	236	4.175	-33.660	41.854	1.00	35.96	A	N
ATOM	311	CA	GLU	236	2.836	-34.220	41.741	1.00	37.44	A	C
ATOM	312	CB	GLU	236	2.825	-35.628	42.346	1.00	42.19	A	C
ATOM	313	CG	GLU	236	3.801	-35.830	43.521	1.00	51.39	A	C
ATOM	314	CD	GLU	236	3.473	-34.977	44.749	1.00	56.39	A	C
ATOM	315	OE1	GLU	236	4.153	-33.948	44.973	1.00	57.90	A	O
ATOM	316	OE2	GLU	236	2.540	-35.344	45.498	1.00	59.34	A	O
ATOM	317	C	GLU	236	1.683	-33.396	42.324	1.00	35.48	A	C
ATOM	318	O	GLU	236	0.586	-33.392	41.765	1.00	31.69	A	O
ATOM	319	N	ASN	237	1.942	-32.680	43.418	1.00	35.26	A	N
ATOM	320	CA	ASN	237	0.901	-31.900	44.086	1.00	36.46	A	C
ATOM	321	CB	ASN	237	1.132	-31.882	45.604	1.00	37.16	A	C
ATOM	322	CG	ASN	237	2.355	-31.073	46.014	1.00	42.23	A	C
ATOM	323	OD1	ASN	237	3.312	-30.923	45.252	1.00	45.28	A	O
ATOM	324	ND2	ASN	237	2.330	-30.557	47.239	1.00	42.95	A	N
ATOM	325	C	ASN	237	0.598	-30.492	43.567	1.00	36.22	A	C
ATOM	326	O	ASN	237	-0.228	-29.788	44.149	1.00	36.70	A	O
ATOM	327	N	VAL	238	1.277	-30.060	42.507	1.00	35.01	A	N
ATOM	328	CA	VAL	238	1.001	-28.738	41.940	1.00	34.83	A	C
ATOM	329	CB	VAL	238	2.279	-27.950	41.627	1.00	35.11	A	C
ATOM	330	CG1	VAL	238	1.915	-26.572	41.089	1.00	35.83	A	C
ATOM	331	CG2	VAL	238	3.138	-27.824	42.870	1.00	35.46	A	C
ATOM	332	C	VAL	238	0.209	-28.961	40.661	1.00	34.58	A	C
ATOM	333	O	VAL	238	0.776	-29.231	39.596	1.00	35.08	A	O
ATOM	334	N	LYS	239	-1.109	-28.853	40.782	1.00	33.61	A	N
ATOM	335	CA	LYS	239	-2.010	-29.087	39.663	1.00	34.72	A	C
ATOM	336	CB	LYS	239	-3.352	-29.622	40.177	1.00	37.33	A	C
ATOM	337	CG	LYS	239	-3.345	-31.080	40.625	1.00	43.03	A	C
ATOM	338	CD	LYS	239	-2.669	-31.282	41.963	1.00	46.06	A	C
ATOM	339	CE	LYS	239	-2.771	-32.742	42.408	1.00	50.62	A	C
ATOM	340	NZ	LYS	239	-2.165	-33.689	41.415	1.00	49.98	A	N
ATOM	341	C	LYS	239	-2.284	-27.930	38.704	1.00	34.59	A	C
ATOM	342	O	LYS	239	-2.189	-26.757	39.062	1.00	35.39	A	O
ATOM	343	N	PHE	240	-2.625	-28.300	37.477	1.00	31.33	A	N
ATOM	344	CA	PHE	240	-2.984	-27.363	36.435	1.00	30.16	A	C
ATOM	345	CB	PHE	240	-2.118	-27.544	35.193	1.00	27.96	A	C
ATOM	346	CG	PHE	240	-2.636	-26.800	33.995	1.00	24.52	A	C
ATOM	347	CD1	PHE	240	-2.726	-25.412	34.010	1.00	25.09	A	C
ATOM	348	CD2	PHE	240	-3.054	-27.482	32.868	1.00	24.50	A	C
ATOM	349	CE1	PHE	240	-3.223	-24.722	32.923	1.00	24.64	A	C
ATOM	350	CE2	PHE	240	-3.555	-26.797	31.767	1.00	26.19	A	C
ATOM	351	CZ	PHE	240	-3.640	-25.413	31.795	1.00	25.52	A	C
ATOM	352	C	PHE	240	-4.422	-27.707	36.075	1.00	32.43	A	C
ATOM	353	O	PHE	240	-4.769	-28.889	35.935	1.00	31.31	A	O
ATOM	354	N	THR	241	-5.243	-26.678	35.893	1.00	31.22	A	N
ATOM	355	CA	TYR	241	-6.637	-26.889	35.558	1.00	31.09	A	C
ATOM	356	CB	TYR	241	-7.534	-26.377	36.682	1.00	35.59	A	C
ATOM	357	CG	TYR	241	-7.334	-27.080	38.006	1.00	40.45	A	C
ATOM	358	CD1	TYR	241	-6.361	-26.648	38.907	1.00	41.01	A	C
ATOM	359	CE1	TYR	241	-6.186	-27.279	40.130	1.00	42.10	A	C
ATOM	360	CD2	TYR	241	-8.127	-28.165	38.365	1.00	42.06	A	C
ATOM	361	CE2	TYR	241	-7.960	-28.804	39.591	1.00	43.63	A	C
ATOM	362	CZ	TYR	241	-6.990	-28.356	40.467	1.00	43.47	A	C
ATOM	363	OH	TYR	241	-6.835	-28.972	41.688	1.00	46.85	A	O
ATOM	364	C	TYR	241	-7.087	-26.264	34.246	1.00	30.94	A	C
ATOM	365	O	TYR	241	-6.645	-25.176	33.856	1.00	28.97	A	O
ATOM	366	N	TYR	242	-7.926	-27.007	33.540	1.00	26.83	A	N
ATOM	367	CA	TYR	242	-8.507	-26.539	32.309	1.00	27.67	A	C
ATOM	368	CB	TYR	242	-7.881	-27.186	31.079	1.00	25.45	A	C
ATOM	369	CG	TYR	242	-8.446	-26.576	29.820	1.00	24.23	A	C
ATOM	370	CD1	TYR	242	-8.011	-25.327	29.384	1.00	20.98	A	C
ATOM	371	CE1	TYR	242	-8.590	-24.705	28.289	1.00	23.79	A	C
ATOM	372	CD2	TYR	242	-9.484	-27.200	29.118	1.00	22.72	A	C
ATOM	373	CE2	TYR	242	-10.079	-26.583	28.010	1.00	24.38	A	C
ATOM	374	CZ	TYR	242	-9.624	-25.332	27.600	1.00	24.38	A	C
ATOM	375	OH	TYR	242	-10.181	-24.708	26.499	1.00	24.13	A	O
ATOM	376	C	TYR	242	-9.993	-26.868	32.377	1.00	31.69	A	C
ATOM	377	O	TYR	242	-10.381	-28.032	32.581	1.00	29.40	A	O
ATOM	378	N	ASP	243	-10.814	-25.827	32.265	1.00	34.10	A	N
ATOM	379	CA	ASP	243	-12.265	-25.967	32.314	1.00	38.91	A	C
ATOM	380	CB	ASP	243	-12.748	-26.890	31.186	1.00	43.21	A	C

ATOM	381	CG	ASP	243	-14.076	-26.451	30.586	1.00	49.00	A	C
ATOM	382	OD1	ASP	243	-14.307	-26.754	29.390	1.00	51.92	A	O
ATOM	383	OD2	ASP	243	-14.886	-25.805	31.293	1.00	49.52	A	O
ATOM	384	C	ASP	243	-12.673	-26.538	33.672	1.00	39.45	A	C
ATOM	385	O	ASP	243	-13.628	-27.303	33.772	1.00	42.54	A	O
ATOM	386	N	GLY	244	-11.908	-26.197	34.704	1.00	40.59	A	N
ATOM	387	CA	GLY	244	-12.200	-26.674	36.043	1.00	41.72	A	C
ATOM	388	C	GLY	244	-11.808	-28.110	36.358	1.00	43.78	A	C
ATOM	389	O	GLY	244	-12.131	-28.608	37.439	1.00	47.57	A	O
ATOM	390	N	LYS	245	-11.110	-28.777	35.445	1.00	41.27	A	N
ATOM	391	CA	LYS	245	-10.689	-30.161	35.666	1.00	42.20	A	C
ATOM	392	CB	LYS	245	-11.351	-31.081	34.644	1.00	44.43	A	C
ATOM	393	CG	LYS	245	-12.862	-31.175	34.795	1.00	47.64	A	C
ATOM	394	CD	LYS	245	-13.514	-31.735	33.541	1.00	51.15	A	C
ATOM	395	CE	LYS	245	-13.342	-30.782	32.360	1.00	51.88	A	C
ATOM	396	NZ	LYS	245	-14.093	-31.241	31.159	1.00	53.25	A	N
ATOM	397	C	LYS	245	-9.173	-30.328	35.607	1.00	41.45	A	C
ATOM	398	O	LYS	245	-8.510	-29.759	34.738	1.00	40.05	A	O
ATOM	399	N	VAL	246	-8.635	-31.128	36.522	1.00	41.46	A	N
ATOM	400	CA	VAL	246	-7.195	-31.375	36.590	1.00	40.74	A	C
ATOM	401	CB	VAL	246	-6.837	-32.412	37.676	1.00	42.70	A	C
ATOM	402	CG1	VAL	246	-5.318	-32.507	37.837	1.00	42.77	A	C
ATOM	403	CG2	VAL	246	-7.491	-32.041	38.999	1.00	42.97	A	C
ATOM	404	C	VAL	246	-6.664	-31.866	35.252	1.00	39.56	A	C
ATOM	405	O	VAL	246	-7.331	-32.622	34.550	1.00	39.01	A	O
ATOM	406	N	MET	247	-5.461	-31.424	34.901	1.00	38.14	A	N
ATOM	407	CA	MET	247	-4.855	-31.810	33.639	1.00	36.86	A	C
ATOM	408	CB	MET	247	-5.368	-30.900	32.524	1.00	37.68	A	C
ATOM	409	CG	MET	247	-4.735	-31.144	31.176	1.00	42.83	A	C
ATOM	410	SD	MET	247	-5.461	-30.094	29.919	1.00	45.21	A	S
ATOM	411	CE	MET	247	-5.044	-31.012	28.447	1.00	46.07	A	C
ATOM	412	C	MET	247	-3.330	-31.788	33.689	1.00	36.54	A	C
ATOM	413	O	MET	247	-2.712	-30.754	33.967	1.00	35.73	A	O
ATOM	414	N	LYS	248	-2.734	-32.952	33.461	1.00	36.48	A	N
ATOM	415	CA	LYS	248	-1.284	-33.091	33.454	1.00	38.31	A	C
ATOM	416	CB	LYS	248	-0.882	-34.540	33.794	1.00	43.66	A	C
ATOM	417	CG	LYS	248	0.498	-34.986	33.279	1.00	49.19	A	C
ATOM	418	CD	LYS	248	0.402	-35.607	31.872	1.00	53.58	A	C
ATOM	419	CE	LYS	248	1.774	-35.833	31.222	1.00	56.34	A	C
ATOM	420	NZ	LYS	248	2.618	-36.843	31.928	1.00	57.67	A	N
ATOM	421	C	LYS	248	-0.758	-32.680	32.080	1.00	36.50	A	C
ATOM	422	O	LYS	248	-1.230	-33.164	31.054	1.00	37.00	A	O
ATOM	423	N	LEU	249	0.188	-31.750	32.070	1.00	32.95	A	N
ATOM	424	CA	LEU	249	0.784	-31.272	30.832	1.00	30.58	A	C
ATOM	425	CB	LEU	249	0.954	-29.752	30.875	1.00	29.19	A	C
ATOM	426	CG	LEU	249	-0.311	-28.911	31.050	1.00	31.35	A	C
ATOM	427	CD1	LEU	249	0.071	-27.475	31.360	1.00	31.28	A	C
ATOM	428	CD2	LEU	249	-1.157	-28.989	29.788	1.00	31.20	A	C
ATOM	429	C	LEU	249	2.149	-31.903	30.649	1.00	28.90	A	C
ATOM	430	O	LEU	249	2.883	-32.095	31.622	1.00	26.81	A	O
ATOM	431	N	SER	250	2.480	-32.220	29.401	1.00	27.82	A	N
ATOM	432	CA	SER	250	3.782	-32.791	29.058	1.00	29.66	A	C
ATOM	433	CB	SER	250	3.825	-33.116	27.568	1.00	33.86	A	C
ATOM	434	OG	SER	250	3.618	-31.941	26.797	1.00	42.58	A	O
ATOM	435	C	SER	250	4.836	-31.721	29.387	1.00	28.32	A	C
ATOM	436	O	SER	250	4.528	-30.529	29.389	1.00	25.77	A	O
ATOM	437	N	PRO	251	6.083	-32.133	29.664	1.00	28.24	A	N
ATOM	438	CD	PRO	251	6.565	-33.524	29.581	1.00	28.49	A	C
ATOM	439	CA	PRO	251	7.188	-31.225	30.003	1.00	27.46	A	C
ATOM	440	CB	PRO	251	8.413	-32.121	29.859	1.00	28.23	A	C
ATOM	441	CG	PRO	251	7.889	-33.443	30.291	1.00	30.79	A	C
ATOM	442	C	PRO	251	7.310	-29.982	29.120	1.00	25.44	A	C
ATOM	443	O	PRO	251	7.419	-28.868	29.620	1.00	23.88	A	O
ATOM	444	N	LYS	252	7.252	-30.185	27.809	1.00	22.76	A	N
ATOM	445	CA	LYS	252	7.372	-29.097	26.863	1.00	26.55	A	C
ATOM	446	CB	LYS	252	7.362	-29.662	25.446	1.00	29.86	A	C
ATOM	447	CG	LYS	252	7.776	-28.682	24.374	1.00	39.18	A	C
ATOM	448	CD	LYS	252	8.306	-29.392	23.131	1.00	42.32	A	C
ATOM	449	CE	LYS	252	7.255	-30.268	22.471	1.00	44.70	A	C
ATOM	450	NZ	LYS	252	7.721	-30.773	21.140	1.00	46.94	A	N
ATOM	451	C	LYS	252	6.292	-28.027	27.060	1.00	25.90	A	C
ATOM	452	O	LYS	252	6.608	-26.847	27.152	1.00	26.81	A	O
ATOM	453	N	ALA	253	5.033	-28.442	27.183	1.00	23.18	A	N
ATOM	454	CA	ALA	253	3.930	-27.498	27.380	1.00	21.98	A	C
ATOM	455	CB	ALA	253	2.606	-28.149	27.037	1.00	20.14	A	C
ATOM	456	C	ALA	253	3.885	-26.948	28.802	1.00	21.09	A	C

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ATOM	457	O	ALA	253	3.547	-25.786	29.011	1.00	18.56	A	O
ATOM	458	N	GLU	254	4.233	-27.788	29.773	1.00	19.71	A	N
ATOM	459	CA	GLU	254	4.229	-27.399	31.177	1.00	20.26	A	C
ATOM	460	CB	GLU	254	4.482	-28.613	32.070	1.00	20.69	A	C
ATOM	461	CG	GLU	254	4.432	-28.316	33.551	1.00	26.62	A	C
ATOM	462	CD	GLU	254	4.768	-29.536	34.406	1.00	35.69	A	C
ATOM	463	OE1	GLU	254	5.967	-29.787	34.655	1.00	33.98	A	O
ATOM	464	OE2	GLU	254	3.830	-30.236	34.847	1.00	38.55	A	O
ATOM	465	C	GLU	254	5.269	-26.325	31.470	1.00	22.03	A	C
ATOM	466	O	GLU	254	5.047	-25.452	32.312	1.00	22.43	A	O
ATOM	467	N	GLU	255	6.400	-26.394	30.777	1.00	22.20	A	N
ATOM	468	CA	GLU	255	7.454	-25.412	30.976	1.00	23.52	A	C
ATOM	469	CB	GLU	255	8.729	-25.805	30.230	1.00	24.64	A	C
ATOM	470	CG	GLU	255	9.861	-24.809	30.468	1.00	32.02	A	C
ATOM	471	CD	GLU	255	11.169	-25.182	29.783	1.00	37.45	A	C
ATOM	472	OE1	GLU	255	12.231	-24.744	30.284	1.00	37.34	A	O
ATOM	473	OE2	GLU	255	11.143	-25.886	28.745	1.00	39.38	A	O
ATOM	474	C	GLU	255	6.984	-24.030	30.531	1.00	22.12	A	C
ATOM	475	O	GLU	255	7.147	-23.055	31.261	1.00	22.34	A	O
ATOM	476	N	VAL	256	6.381	-23.957	29.349	1.00	21.47	A	N
ATOM	477	CA	VAL	256	5.875	-22.686	28.831	1.00	19.60	A	C
ATOM	478	CB	VAL	256	5.291	-22.857	27.409	1.00	20.11	A	C
ATOM	479	CG1	VAL	256	4.761	-21.537	26.876	1.00	16.95	A	C
ATOM	480	CG2	VAL	256	6.359	-23.399	26.468	1.00	20.06	A	C
ATOM	481	C	VAL	256	4.814	-22.137	29.782	1.00	20.63	A	C
ATOM	482	O	VAL	256	4.752	-20.933	30.029	1.00	23.56	A	O
ATOM	483	N	ALA	257	4.013	-23.032	30.357	1.00	21.36	A	N
ATOM	484	CA	ALA	257	2.968	-22.640	31.303	1.00	20.46	A	C
ATOM	485	CB	ALA	257	2.091	-23.835	31.652	1.00	21.55	A	C
ATOM	486	C	ALA	257	3.538	-22.030	32.581	1.00	19.66	A	C
ATOM	487	O	ALA	257	2.926	-21.136	33.161	1.00	20.22	A	O
ATOM	488	N	THR	258	4.697	-22.514	33.028	1.00	18.19	A	N
ATOM	489	CA	THR	258	5.308	-21.984	34.251	1.00	18.77	A	C
ATOM	490	CB	THR	258	6.539	-22.798	34.706	1.00	22.82	A	C
ATOM	491	OG1	THR	258	7.556	-22.736	33.699	1.00	23.21	A	O
ATOM	492	CG2	THR	258	6.163	-24.256	34.968	1.00	23.09	A	C
ATOM	493	C	THR	258	5.744	-20.534	34.066	1.00	18.45	A	C
ATOM	494	O	THR	258	5.707	-19.743	35.015	1.00	19.74	A	O
ATOM	495	N	PHE	259	6.158	-20.196	32.848	1.00	17.84	A	N
ATOM	496	CA	PHE	259	6.597	-18.829	32.539	1.00	19.28	A	C
ATOM	497	CB	PHE	259	7.096	-18.717	31.097	1.00	18.62	A	C
ATOM	498	CG	PHE	259	8.265	-19.598	30.786	1.00	18.22	A	C
ATOM	499	CD1	PHE	259	9.182	-19.942	31.773	1.00	20.76	A	C
ATOM	500	CD2	PHE	259	8.448	-20.085	29.506	1.00	19.30	A	C
ATOM	501	CE1	PHE	259	10.261	-20.760	31.483	1.00	23.52	A	C
ATOM	502	CE2	PHE	259	9.522	-20.902	29.204	1.00	21.58	A	C
ATOM	503	CZ	PHE	259	10.432	-21.243	30.196	1.00	24.35	A	C
ATOM	504	C	PHE	259	5.442	-17.872	32.717	1.00	18.89	A	C
ATOM	505	O	PHE	259	5.605	-16.786	33.265	1.00	22.18	A	O
ATOM	506	N	PHE	260	4.277	-18.261	32.215	1.00	20.95	A	N
ATOM	507	CA	PHE	260	3.092	-17.419	32.335	1.00	21.21	A	C
ATOM	508	CB	PHE	260	1.951	-17.982	31.486	1.00	20.00	A	C
ATOM	509	CG	PHE	260	0.785	-17.062	31.358	1.00	21.10	A	C
ATOM	510	CD1	PHE	260	0.805	-16.026	30.439	1.00	21.23	A	C
ATOM	511	CD2	PHE	260	-0.344	-17.233	32.145	1.00	23.56	A	C
ATOM	512	CE1	PHE	260	-0.281	-15.172	30.300	1.00	24.58	A	C
ATOM	513	CE2	PHE	260	-1.444	-16.380	32.014	1.00	25.29	A	C
ATOM	514	CZ	PHE	260	-1.409	-15.347	31.088	1.00	22.43	A	C
ATOM	515	C	PHE	260	2.687	-17.324	33.811	1.00	21.11	A	C
ATOM	516	O	PHE	260	2.379	-16.241	34.304	1.00	19.39	A	O
ATOM	517	N	ALA	261	2.766	-18.451	34.516	1.00	21.47	A	N
ATOM	518	CA	ALA	261	2.412	-18.521	35.937	1.00	24.17	A	C
ATOM	519	CB	ALA	261	2.499	-19.955	36.437	1.00	21.73	A	C
ATOM	520	C	ALA	261	3.259	-17.611	36.819	1.00	26.59	A	C
ATOM	521	O	ALA	261	2.745	-17.006	37.756	1.00	26.56	A	O
ATOM	522	N	LYS	262	4.555	-17.522	36.524	1.00	28.23	A	N
ATOM	523	CA	LYS	262	5.460	-16.673	37.296	1.00	30.34	A	C
ATOM	524	CB	LYS	262	6.919	-17.013	36.983	1.00	31.38	A	C
ATOM	525	CG	LYS	262	7.378	-18.402	37.394	1.00	34.63	A	C
ATOM	526	CD	LYS	262	8.780	-18.642	36.849	1.00	36.73	A	C
ATOM	527	CE	LYS	262	9.192	-20.100	36.914	1.00	38.72	A	C
ATOM	528	NZ	LYS	262	10.481	-20.347	36.182	1.00	39.38	A	N
ATOM	529	C	LYS	262	5.240	-15.180	37.025	1.00	30.26	A	C
ATOM	530	O	LYS	262	5.759	-14.336	37.755	1.00	31.45	A	O
ATOM	531	N	MET	263	4.515	-14.859	35.956	1.00	30.62	A	N
ATOM	532	CA	MET	263	4.246	-13.465	35.589	1.00	32.76	A	C

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ATOM	533	CB	MET	263	4.519	-13.247	34.109	1.00	33.24	A	C
ATOM	534	CG	MET	263	5.914	-13.544	33.671	1.00	37.10	A	C
ATOM	535	SD	MET	263	6.008	-13.274	31.911	1.00	40.99	A	S
ATOM	536	CE	MET	263	7.672	-12.568	31.754	1.00	44.08	A	C
ATOM	537	C	MET	263	2.805	-13.044	35.869	1.00	33.11	A	C
ATOM	538	O	MET	263	2.384	-11.954	35.477	1.00	34.64	A	O
ATOM	539	N	LEU	264	2.074	-13.900	36.573	1.00	31.88	A	N
ATOM	540	CA	LEU	264	0.675	-13.671	36.912	1.00	35.24	A	C
ATOM	541	CB	LEU	264	0.145	-14.850	37.732	1.00	32.91	A	C
ATOM	542	CG	LEU	264	-1.121	-15.503	37.184	1.00	37.13	A	C
ATOM	543	CD1	LEU	264	-0.945	-15.840	35.715	1.00	34.40	A	C
ATOM	544	CD2	LEU	264	-1.453	-16.750	37.995	1.00	37.25	A	C
ATOM	545	C	LEU	264	0.386	-12.361	37.645	1.00	37.15	A	C
ATOM	546	O	LEU	264	-0.703	-11.804	37.506	1.00	35.93	A	O
ATOM	547	N	ASP	265	1.353	-11.882	38.426	1.00	37.71	A	N
ATOM	548	CA	ASP	265	1.196	-10.640	39.184	1.00	40.49	A	C
ATOM	549	CB	ASP	265	2.284	-10.532	40.261	1.00	43.24	A	C
ATOM	550	CG	ASP	265	2.260	-11.697	41.247	1.00	48.99	A	C
ATOM	551	OD1	ASP	265	3.350	-12.137	41.677	1.00	50.78	A	O
ATOM	552	OD2	ASP	265	1.157	-12.171	41.600	1.00	50.31	A	O
ATOM	553	C	ASP	265	1.211	-9.375	38.320	1.00	39.24	A	C
ATOM	554	O	ASP	265	0.551	-8.395	38.646	1.00	39.30	A	O
ATOM	555	N	HIS	266	1.949	-9.407	37.214	1.00	38.73	A	N
ATOM	556	CA	HIS	266	2.061	-8.249	36.322	1.00	39.48	A	C
ATOM	557	CB	HIS	266	3.229	-8.438	35.363	1.00	42.00	A	C
ATOM	558	CG	HIS	266	4.536	-8.679	36.043	1.00	48.12	A	C
ATOM	559	CD2	HIS	266	5.372	-7.835	36.693	1.00	50.61	A	C
ATOM	560	ND1	HIS	266	5.138	-9.918	36.076	1.00	50.23	A	N
ATOM	561	CE1	HIS	266	6.291	-9.828	36.714	1.00	52.06	A	C
ATOM	562	NE2	HIS	266	6.457	-8.575	37.099	1.00	53.76	A	N
ATOM	563	C	HIS	266	0.810	-7.928	35.506	1.00	37.98	A	C
ATOM	564	O	HIS	266	0.150	-8.827	34.979	1.00	36.49	A	O
ATOM	565	N	GLU	267	0.523	-6.637	35.359	1.00	35.13	A	N
ATOM	566	CA	GLU	267	-0.636	-6.197	34.596	1.00	34.76	A	C
ATOM	567	CB	GLU	267	-0.854	-4.683	34.743	1.00	40.45	A	C
ATOM	568	CG	GLU	267	-1.371	-4.241	36.119	1.00	49.31	A	C
ATOM	569	CD	GLU	267	-1.704	-2.748	36.182	1.00	54.85	A	C
ATOM	570	OE1	GLU	267	-1.038	-2.012	36.946	1.00	56.90	A	O
ATOM	571	OE2	GLU	267	-2.636	-2.310	35.470	1.00	58.26	A	O
ATOM	572	C	GLU	267	-0.524	-6.545	33.118	1.00	32.07	A	C
ATOM	573	O	GLU	267	-1.540	-6.720	32.450	1.00	30.73	A	O
ATOM	574	N	TYR	268	0.696	-6.663	32.602	1.00	28.09	A	N
ATOM	575	CA	TYR	268	0.848	-6.977	31.191	1.00	26.09	A	C
ATOM	576	CB	TYR	268	2.285	-6.736	30.680	1.00	26.84	A	C
ATOM	577	CG	TYR	268	3.389	-7.549	31.324	1.00	27.73	A	C
ATOM	578	CD1	TYR	268	3.504	-8.913	31.084	1.00	26.04	A	C
ATOM	579	CE1	TYR	268	4.525	-9.659	31.642	1.00	27.91	A	C
ATOM	580	CD2	TYR	268	4.339	-6.941	32.152	1.00	28.10	A	C
ATOM	581	CE2	TYR	268	5.374	-7.678	32.718	1.00	27.56	A	C
ATOM	582	CZ	TYR	268	5.458	-9.043	32.458	1.00	31.11	A	C
ATOM	583	OH	TYR	268	6.457	-9.807	33.019	1.00	35.28	A	O
ATOM	584	C	TYR	268	0.300	-8.341	30.761	1.00	22.54	A	C
ATOM	585	O	TYR	268	0.028	-8.534	29.585	1.00	21.10	A	O
ATOM	586	N	THR	269	0.100	-9.264	31.703	1.00	21.25	A	N
ATOM	587	CA	THR	269	-0.457	-10.576	31.358	1.00	22.20	A	C
ATOM	588	CB	THR	269	-0.269	-11.646	32.470	1.00	23.84	A	C
ATOM	589	OG1	THR	269	-0.810	-11.182	33.703	1.00	28.90	A	O
ATOM	590	CG2	THR	269	1.192	-11.989	32.654	1.00	22.35	A	C
ATOM	591	C	THR	269	-1.952	-10.479	31.058	1.00	23.71	A	C
ATOM	592	O	THR	269	-2.566	-11.457	30.620	1.00	23.60	A	O
ATOM	593	N	THR	270	-2.547	-9.324	31.348	1.00	21.37	A	N
ATOM	594	CA	THR	270	-3.958	-9.116	31.070	1.00	21.95	A	C
ATOM	595	CB	THR	270	-4.641	-8.189	32.102	1.00	23.89	A	C
ATOM	596	OG1	THR	270	-4.029	-6.894	32.065	1.00	28.71	A	O
ATOM	597	CG2	THR	270	-4.523	-8.764	33.500	1.00	23.88	A	C
ATOM	598	C	THR	270	-4.087	-8.486	29.700	1.00	21.52	A	C
ATOM	599	O	THR	270	-5.176	-8.414	29.159	1.00	24.13	A	O
ATOM	600	N	LYS	271	-2.965	-8.056	29.126	1.00	22.16	A	N
ATOM	601	CA	LYS	271	-2.968	-7.420	27.809	1.00	20.71	A	C
ATOM	602	CB	LYS	271	-1.660	-6.668	27.565	1.00	20.70	A	C
ATOM	603	CG	LYS	271	-1.471	-5.491	28.511	1.00	26.47	A	C
ATOM	604	CD	LYS	271	-0.347	-4.581	28.059	1.00	32.82	A	C
ATOM	605	CE	LYS	271	-0.245	-3.353	28.958	1.00	37.20	A	C
ATOM	606	NZ	LYS	271	0.952	-2.526	28.613	1.00	41.27	A	N
ATOM	607	C	LYS	271	-3.264	-8.340	26.631	1.00	21.12	A	C
ATOM	608	O	LYS	271	-2.781	-9.460	26.562	1.00	22.30	A	O



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ATOM	609	N	GLU	272	-4.056	-7.824	25.701	1.00	21.84	A	N
ATOM	610	CA	GLU	272	-4.464	-8.523	24.487	1.00	24.82	A	C
ATOM	611	CB	GLU	272	-5.235	-7.550	23.601	1.00	31.08	A	C
ATOM	612	CG	GLU	272	-6.705	-7.813	23.499	1.00	43.75	A	C
ATOM	613	CD	GLU	272	-7.037	-8.803	22.408	1.00	49.04	A	C
ATOM	614	OE1	GLU	272	-6.281	-8.881	21.410	1.00	53.65	A	O
ATOM	615	OE2	GLU	272	-8.065	-9.497	22.543	1.00	53.71	A	O
ATOM	616	C	GLU	272	-3.291	-9.082	23.686	1.00	22.08	A	C
ATOM	617	O	GLU	272	-3.241	-10.278	23.401	1.00	22.40	A	O
ATOM	618	N	ILE	273	-2.360	-8.204	23.309	1.00	18.65	A	N
ATOM	619	CA	ILE	273	-1.211	-8.609	22.521	1.00	17.76	A	C
ATOM	620	CB	ILE	273	-0.314	-7.394	22.161	1.00	22.08	A	C
ATOM	621	CG2	ILE	273	0.917	-7.855	21.381	1.00	18.90	A	C
ATOM	622	CG1	ILE	273	-1.115	-6.394	21.323	1.00	22.78	A	C
ATOM	623	CD1	ILE	273	-0.401	-5.088	21.052	1.00	30.93	A	C
ATOM	624	C	ILE	273	-0.387	-9.695	23.211	1.00	15.64	A	C
ATOM	625	O	ILE	273	-0.012	-10.682	22.582	1.00	15.70	A	O
ATOM	626	N	PHE	274	-0.172	-9.529	24.512	1.00	12.16	A	N
ATOM	627	CA	PHE	274	0.599	-10.471	25.302	1.00	12.70	A	C
ATOM	628	CB	PHE	274	0.742	-9.980	26.754	1.00	12.59	A	C
ATOM	629	CG	PHE	274	1.748	-10.768	27.567	1.00	14.70	A	C
ATOM	630	CD1	PHE	274	3.069	-10.337	27.671	1.00	15.63	A	C
ATOM	631	CD2	PHE	274	1.390	-11.960	28.186	1.00	14.75	A	C
ATOM	632	CE1	PHE	274	4.019	-11.085	28.371	1.00	17.26	A	C
ATOM	633	CE2	PHE	274	2.329	-12.714	28.886	1.00	17.89	A	C
ATOM	634	CZ	PHE	274	3.649	-12.278	28.979	1.00	15.56	A	C
ATOM	635	C	PHE	274	-0.069	-11.831	25.293	1.00	13.52	A	C
ATOM	636	O	PHE	274	0.582	-12.849	25.075	1.00	15.17	A	O
ATOM	637	N	ARG	275	-1.376	-11.839	25.512	1.00	14.97	A	N
ATOM	638	CA	ARG	275	-2.123	-13.087	25.562	1.00	15.96	A	C
ATOM	639	CB	ARG	275	-3.479	-12.845	26.206	1.00	16.66	A	C
ATOM	640	CG	ARG	275	-3.341	-12.425	27.656	1.00	18.62	A	C
ATOM	641	CD	ARG	275	-4.629	-11.870	28.239	1.00	23.65	A	C
ATOM	642	NE	ARG	275	-5.612	-12.905	28.549	1.00	25.33	A	N
ATOM	643	CZ	ARG	275	-5.662	-13.588	29.689	1.00	25.41	A	C
ATOM	644	NH1	ARG	275	-4.779	-13.363	30.650	1.00	25.82	A	N
ATOM	645	NH2	ARG	275	-6.624	-14.481	29.877	1.00	25.85	A	N
ATOM	646	C	ARG	275	-2.247	-13.784	24.223	1.00	15.67	A	C
ATOM	647	O	ARG	275	-2.230	-15.006	24.160	1.00	18.79	A	O
ATOM	648	N	LYS	276	-2.329	-12.991	23.158	1.00	17.35	A	N
ATOM	649	CA	LYS	276	-2.434	-13.491	21.801	1.00	17.31	A	C
ATOM	650	CB	LYS	276	-2.712	-12.322	20.834	1.00	15.81	A	C
ATOM	651	CG	LYS	276	-2.665	-12.699	19.358	1.00	20.60	A	C
ATOM	652	CD	LYS	276	-3.023	-11.521	18.442	1.00	25.96	A	C
ATOM	653	CE	LYS	276	-2.115	-10.311	18.654	1.00	30.27	A	C
ATOM	654	NZ	LYS	276	-0.667	-10.586	18.344	1.00	31.85	A	N
ATOM	655	C	LYS	276	-1.119	-14.186	21.435	1.00	17.72	A	C
ATOM	656	O	LYS	276	-1.113	-15.355	21.058	1.00	16.81	A	O
ATOM	657	N	ASN	277	-0.008	-13.465	21.577	1.00	16.49	A	N
ATOM	658	CA	ASN	277	1.305	-14.016	21.263	1.00	15.22	A	C
ATOM	659	CB	ASN	277	2.406	-12.975	21.449	1.00	13.92	A	C
ATOM	660	CG	ASN	277	2.321	-11.845	20.443	1.00	18.31	A	C
ATOM	661	OD1	ASN	277	2.630	-10.687	20.765	1.00	21.17	A	O
ATOM	662	ND2	ASN	277	1.909	-12.165	19.220	1.00	14.00	A	N
ATOM	663	C	ASN	277	1.627	-15.219	22.122	1.00	13.08	A	C
ATOM	664	O	ASN	277	2.113	-16.229	21.616	1.00	17.03	A	O
ATOM	665	N	PHE	278	1.352	-15.117	23.417	1.00	13.04	A	N
ATOM	666	CA	PHE	278	1.640	-16.216	24.324	1.00	13.23	A	C
ATOM	667	CB	PHE	278	1.294	-15.873	25.768	1.00	11.67	A	C
ATOM	668	CG	PHE	278	1.360	-17.064	26.691	1.00	16.73	A	C
ATOM	669	CD1	PHE	278	2.589	-17.607	27.061	1.00	17.29	A	C
ATOM	670	CD2	PHE	278	0.193	-17.715	27.099	1.00	15.69	A	C
ATOM	671	CE1	PHE	278	2.661	-18.775	27.804	1.00	14.92	A	C
ATOM	672	CE2	PHE	278	0.258	-18.890	27.845	1.00	12.04	A	C
ATOM	673	CZ	PHE	278	1.492	-19.419	28.192	1.00	16.97	A	C
ATOM	674	C	PHE	278	0.937	-17.510	23.958	1.00	19.07	A	C
ATOM	675	O	PHE	278	1.578	-18.556	23.839	1.00	18.14	A	O
ATOM	676	N	PHE	279	-0.383	-17.446	23.817	1.00	19.34	A	N
ATOM	677	CA	PHE	279	-1.156	-18.641	23.516	1.00	19.46	A	C
ATOM	678	CB	PHE	279	-2.651	-18.352	23.631	1.00	19.27	A	C
ATOM	679	CG	PHE	279	-3.501	-19.578	23.566	1.00	19.43	A	C
ATOM	680	CD1	PHE	279	-3.548	-20.458	24.636	1.00	19.83	A	C
ATOM	681	CD2	PHE	279	-4.212	-19.878	22.418	1.00	20.40	A	C
ATOM	682	CE1	PHE	279	-4.285	-21.627	24.570	1.00	17.89	A	C
ATOM	683	CE2	PHE	279	-4.958	-21.049	22.334	1.00	25.32	A	C
ATOM	684	CZ	PHE	279	-4.992	-21.928	23.416	1.00	23.49	A	C

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ATOM	685	C	PHE	279	-0.814	-19.245	22.157	1.00	21.00	A	C
ATOM	686	O	PHE	279	-0.835	-20.469	21.994	1.00	23.17	A	O
ATOM	687	N	LYS	280	-0.479	-18.398	21.190	1.00	20.52	A	N
ATOM	688	CA	LYS	280	-0.118	-18.884	19.865	1.00	24.50	A	C
ATOM	689	CB	LYS	280	0.026	-17.719	18.887	1.00	27.74	A	C
ATOM	690	CG	LYS	280	0.529	-18.121	17.518	1.00	32.07	A	C
ATOM	691	CD	LYS	280	0.209	-17.048	16.492	1.00	37.43	A	C
ATOM	692	CE	LYS	280	1.085	-17.184	15.259	1.00	41.94	A	C
ATOM	693	NZ	LYS	280	2.496	-16.780	15.537	1.00	43.12	A	N
ATOM	694	C	LYS	280	1.181	-19.700	19.952	1.00	26.13	A	C
ATOM	695	O	LYS	280	1.294	-20.767	19.338	1.00	22.36	A	O
ATOM	696	N	ASP	281	2.138	-19.214	20.744	1.00	22.83	A	N
ATOM	697	CA	ASP	281	3.401	-19.922	20.923	1.00	25.00	A	C
ATOM	698	CB	ASP	281	4.478	-19.003	21.497	1.00	26.24	A	C
ATOM	699	CG	ASP	281	5.030	-18.039	20.467	1.00	29.59	A	C
ATOM	700	OD1	ASP	281	5.581	-17.010	20.883	1.00	33.94	A	O
ATOM	701	OD2	ASP	281	4.922	-18.298	19.245	1.00	33.26	A	O
ATOM	702	C	ASP	281	3.250	-21.149	21.806	1.00	23.51	A	C
ATOM	703	O	ASP	281	3.872	-22.173	21.549	1.00	25.12	A	O
ATOM	704	N	TRP	282	2.405	-21.061	22.827	1.00	21.47	A	N
ATOM	705	CA	TRP	282	2.191	-22.187	23.735	1.00	21.04	A	C
ATOM	706	CB	TRP	282	1.308	-21.744	24.893	1.00	20.24	A	C
ATOM	707	CG	TRP	282	1.151	-22.744	25.987	1.00	18.13	A	C
ATOM	708	CD2	TRP	282	0.040	-22.857	26.884	1.00	19.75	A	C
ATOM	709	CE2	TRP	282	0.336	-23.902	27.786	1.00	19.74	A	C
ATOM	710	CE3	TRP	282	-1.177	-22.178	27.012	1.00	18.27	A	C
ATOM	711	CD1	TRP	282	2.043	-23.698	26.364	1.00	20.83	A	C
ATOM	712	NE1	TRP	282	1.566	-24.395	27.449	1.00	18.05	A	N
ATOM	713	CZ2	TRP	282	-0.540	-24.284	28.803	1.00	20.28	A	C
ATOM	714	CZ3	TRP	282	-2.048	-22.557	28.023	1.00	18.33	A	C
ATOM	715	CH2	TRP	282	-1.725	-23.600	28.907	1.00	21.34	A	C
ATOM	716	C	TRP	282	1.564	-23.383	22.986	1.00	22.60	A	C
ATOM	717	O	TRP	282	1.903	-24.547	23.250	1.00	21.30	A	O
ATOM	718	N	ARG	283	0.703	-23.074	22.017	1.00	23.73	A	N
ATOM	719	CA	ARG	283	0.024	-24.072	21.191	1.00	24.69	A	C
ATOM	720	CB	ARG	283	-0.951	-23.402	20.226	1.00	26.77	A	C
ATOM	721	CG	ARG	283	-2.204	-22.842	20.863	1.00	31.78	A	C
ATOM	722	CD	ARG	283	-3.291	-23.889	20.951	1.00	33.49	A	C
ATOM	723	NE	ARG	283	-3.689	-24.359	19.627	1.00	32.77	A	N
ATOM	724	CZ	ARG	283	-4.714	-25.172	19.396	1.00	33.62	A	C
ATOM	725	NH1	ARG	283	-5.465	-25.602	20.401	1.00	30.23	A	N
ATOM	726	NH2	ARG	283	-4.937	-25.620	18.168	1.00	35.75	A	N
ATOM	727	C	ARG	283	-1.017	-24.897	20.385	1.00	26.67	A	C
ATOM	728	O	ARG	283	0.820	-26.102	20.215	1.00	25.16	A	O
ATOM	729	N	LYS	284	2.061	-24.243	19.865	1.00	26.74	A	N
ATOM	730	CA	LYS	284	3.094	-24.931	19.081	1.00	29.02	A	C
ATOM	731	CB	LYS	284	4.121	-23.939	18.526	1.00	30.94	A	C
ATOM	732	CG	LYS	284	3.616	-22.940	17.515	1.00	35.33	A	C
ATOM	733	CD	LYS	284	4.787	-22.103	17.011	1.00	41.22	A	C
ATOM	734	CE	LYS	284	4.339	-20.915	16.168	1.00	44.58	A	C
ATOM	735	NZ	LYS	284	3.641	-19.880	16.972	1.00	49.16	A	N
ATOM	736	C	LYS	284	3.845	-25.948	19.940	1.00	28.49	A	C
ATOM	737	O	LYS	284	4.430	-26.892	19.419	1.00	31.72	A	O
ATOM	738	N	GLU	285	3.840	-25.733	21.253	1.00	29.92	A	N
ATOM	739	CA	GLU	285	4.526	-26.608	22.200	1.00	30.64	A	C
ATOM	740	CB	GLU	285	4.931	-25.830	23.449	1.00	31.25	A	C
ATOM	741	CG	GLU	285	6.390	-25.481	23.506	1.00	38.97	A	C
ATOM	742	CD	GLU	285	6.786	-24.481	22.454	1.00	44.02	A	C
ATOM	743	OE1	GLU	285	6.082	-23.458	22.326	1.00	49.45	A	O
ATOM	744	OE2	GLU	285	7.805	-24.707	21.766	1.00	47.40	A	O
ATOM	745	C	GLU	285	3.729	-27.813	22.645	1.00	30.10	A	C
ATOM	746	O	GLU	285	4.297	-28.782	23.139	1.00	31.40	A	O
ATOM	747	N	MET	286	2.416	-27.737	22.494	1.00	29.29	A	N
ATOM	748	CA	MET	286	1.527	-28.814	22.918	1.00	29.09	A	C
ATOM	749	CB	MET	286	0.098	-28.286	23.024	1.00	25.82	A	C
ATOM	750	CG	MET	286	-0.141	-27.272	24.118	1.00	28.93	A	C
ATOM	751	SD	MET	286	-1.798	-26.556	23.939	1.00	32.09	A	S
ATOM	752	CE	MET	286	-1.506	-24.895	24.455	1.00	35.64	A	C
ATOM	753	C	MET	286	1.507	-30.054	22.028	1.00	27.63	A	C
ATOM	754	O	MET	286	1.768	-29.983	20.837	1.00	26.99	A	O
ATOM	755	N	THR	287	1.173	-31.190	22.631	1.00	31.01	A	N
ATOM	756	CA	THR	287	1.028	-32.441	21.900	1.00	34.02	A	C
ATOM	757	CB	THR	287	0.956	-33.650	22.865	1.00	35.55	A	C
ATOM	758	OG1	THR	287	-0.201	-33.533	23.706	1.00	37.16	A	O
ATOM	759	CG2	THR	287	2.193	-33.714	23.743	1.00	35.59	A	C
ATOM	760	C	THR	287	-0.324	-32.293	21.183	1.00	35.76	A	C

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ATOM	761	O	THR	287	-1.108	-31.395	21.517	1.00	34.82	A	O
ATOM	762	N	ASN	288	-0.610	-33.157	20.213	1.00	37.40	A	N
ATOM	763	CA	ASN	288	-1.878	-33.065	19.489	1.00	40.09	A	C
ATOM	764	CB	ASN	288	-1.888	-34.008	18.288	1.00	43.78	A	C
ATOM	765	CG	ASN	288	-0.870	-33.611	17.242	1.00	49.34	A	C
ATOM	766	OD1	ASN	288	0.185	-34.237	17.114	1.00	53.11	A	O
ATOM	767	ND2	ASN	288	-1.163	-32.541	16.510	1.00	50.82	A	N
ATOM	768	C	ASN	288	-3.101	-33.295	20.379	1.00	40.88	A	C
ATOM	769	O	ASN	288	-4.172	-32.734	20.131	1.00	40.05	A	O
ATOM	770	N	GLU	289	-2.925	-34.093	21.429	1.00	39.69	A	N
ATOM	771	CA	GLU	289	-4.002	-34.381	22.365	1.00	41.66	A	C
ATOM	772	CB	GLU	289	-3.639	-35.573	23.260	1.00	46.58	A	C
ATOM	773	CG	GLU	289	-3.276	-36.867	22.506	1.00	54.57	A	C
ATOM	774	CD	GLU	289	-1.834	-36.889	21.992	1.00	58.03	A	C
ATOM	775	OE1	GLU	289	-1.634	-36.826	20.756	1.00	57.59	A	O
ATOM	776	OE2	GLU	289	-0.904	-36.981	22.826	1.00	59.15	A	O
ATOM	777	C	GLU	289	-4.273	-33.147	23.230	1.00	39.85	A	C
ATOM	778	O	GLU	289	-5.425	-32.832	23.538	1.00	38.56	A	O
ATOM	779	N	GLU	290	-3.202	-32.463	23.626	1.00	37.75	A	N
ATOM	780	CA	GLU	290	-3.314	-31.262	24.441	1.00	35.76	A	C
ATOM	781	CB	GLU	290	-1.938	-30.843	24.972	1.00	38.51	A	C
ATOM	782	CG	GLU	290	-1.320	-31.852	25.952	1.00	39.71	A	C
ATOM	783	CD	GLU	290	0.088	-31.474	26.407	1.00	40.29	A	C
ATOM	784	OE1	GLU	290	0.349	-31.548	27.623	1.00	39.66	A	O
ATOM	785	OE2	GLU	290	0.936	-31.116	25.557	1.00	37.72	A	O
ATOM	786	C	GLU	290	-3.953	-30.133	23.632	1.00	33.43	A	C
ATOM	787	O	GLU	290	-4.777	-29.398	24.148	1.00	32.95	A	O
ATOM	788	N	LYS	291	-3.621	-30.042	22.349	1.00	33.71	A	N
ATOM	789	CA	LYS	291	-4.183	-29.003	21.491	1.00	34.59	A	C
ATOM	790	CB	LYS	291	-3.450	-28.943	20.155	1.00	34.36	A	C
ATOM	791	CG	LYS	291	-2.037	-28.420	20.271	1.00	40.36	A	C
ATOM	792	CD	LYS	291	-1.522	-27.875	18.952	1.00	43.40	A	C
ATOM	793	CE	LYS	291	-1.347	-28.956	17.920	1.00	42.90	A	C
ATOM	794	NZ	LYS	291	-0.800	-28.356	16.676	1.00	47.77	A	N
ATOM	795	C	LYS	291	-5.683	-29.155	21.250	1.00	36.33	A	C
ATOM	796	O	LYS	291	-6.367	-28.178	20.923	1.00	38.11	A	O
ATOM	797	N	ASN	292	-6.189	-30.377	21.404	1.00	34.59	A	N
ATOM	798	CA	ASN	292	-7.609	-30.645	21.212	1.00	35.88	A	C
ATOM	799	CB	ASN	292	-7.854	-32.126	20.922	1.00	38.77	A	C
ATOM	800	CG	ASN	292	-7.488	-32.505	19.506	1.00	43.53	A	C
ATOM	801	OD1	ASN	292	-7.274	-31.641	18.652	1.00	47.09	A	O
ATOM	802	ND2	ASN	292	-7.416	-33.806	19.243	1.00	47.89	A	N
ATOM	803	C	ASN	292	-8.448	-30.217	22.400	1.00	33.56	A	C
ATOM	804	O	ASN	292	-9.621	-29.888	22.244	1.00	34.61	A	O
ATOM	805	N	ILE	293	-7.847	-30.241	23.584	1.00	32.61	A	N
ATOM	806	CA	ILE	293	-8.533	-29.850	24.809	1.00	31.87	A	C
ATOM	807	CB	ILE	293	-7.981	-30.627	26.026	1.00	30.81	A	C
ATOM	808	CG2	ILE	293	-8.709	-30.212	27.296	1.00	33.31	A	C
ATOM	809	CG1	ILE	293	-8.121	-32.134	25.806	1.00	32.57	A	C
ATOM	810	CD1	ILE	293	-7.547	-32.970	26.943	1.00	31.94	A	C
ATOM	811	C	ILE	293	-8.405	-28.338	25.082	1.00	31.48	A	C
ATOM	812	O	ILE	293	-9.401	-27.654	25.302	1.00	30.87	A	O
ATOM	813	N	ILE	294	-7.173	-27.837	25.067	1.00	28.12	A	N
ATOM	814	CA	ILE	294	-6.893	-26.433	25.335	1.00	27.56	A	C
ATOM	815	CB	ILE	294	-5.472	-26.273	25.886	1.00	27.20	A	C
ATOM	816	CG2	ILE	294	-5.257	-24.843	26.354	1.00	26.88	A	C
ATOM	817	CG1	ILE	294	-5.265	-27.253	27.048	1.00	29.07	A	C
ATOM	818	CD1	ILE	294	-3.852	-27.328	27.567	1.00	28.11	A	C
ATOM	819	C	ILE	294	-7.080	-25.554	24.104	1.00	25.69	A	C
ATOM	820	O	ILE	294	-6.156	-25.363	23.306	1.00	26.76	A	O
ATOM	821	N	THR	295	-8.282	-25.002	23.969	1.00	23.90	A	N
ATOM	822	CA	THR	295	-8.609	-24.151	22.830	1.00	19.51	A	C
ATOM	823	CB	THR	295	-10.083	-24.279	22.440	1.00	22.31	A	C
ATOM	824	OG1	THR	295	-10.883	-23.734	23.490	1.00	20.65	A	O
ATOM	825	CG2	THR	295	-10.469	-25.754	22.200	1.00	20.40	A	C
ATOM	826	C	THR	295	-8.346	-22.675	23.101	1.00	18.80	A	C
ATOM	827	O	THR	295	-8.267	-21.876	22.172	1.00	18.34	A	O
ATOM	828	N	ASN	296	-8.239	-22.307	24.371	1.00	18.85	A	N
ATOM	829	CA	ASN	296	-7.996	-20.918	24.718	1.00	23.30	A	C
ATOM	830	CB	ASN	296	-9.315	-20.157	24.777	1.00	24.63	A	C
ATOM	831	CG	ASN	296	-10.171	-20.610	25.917	1.00	25.29	A	C
ATOM	832	OD1	ASN	296	-10.077	-20.064	27.014	1.00	27.07	A	O
ATOM	833	ND2	ASN	296	-10.980	-21.650	25.686	1.00	21.14	A	N
ATOM	834	C	ASN	296	-7.290	-20.799	26.051	1.00	21.65	A	C
ATOM	835	O	ASN	296	-7.366	-21.694	26.890	1.00	21.54	A	O
ATOM	836	N	LEU	297	-6.658	-19.646	26.246	1.00	21.10	A	N

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ATOM	837	CA	LEU	297	-5.905	-19.333	27.452	1.00	19.37	A	C
ATOM	838	CB	LEU	297	-4.939	-18.177	27.137	1.00	18.17	A	C
ATOM	839	CG	LEU	297	-4.081	-17.547	28.229	1.00	18.26	A	C
ATOM	840	CD1	LEU	297	-3.185	-18.600	28.859	1.00	16.76	A	C
ATOM	841	CD2	LEU	297	-3.249	-16.423	27.630	1.00	16.47	A	C
ATOM	842	C	LEU	297	-6.771	-18.980	28.660	1.00	20.83	A	C
ATOM	843	O	LEU	297	-6.399	-19.270	29.798	1.00	21.91	A	O
ATOM	844	N	SER	298	-7.938	-18.391	28.411	1.00	23.89	A	N
ATOM	845	CA	SER	298	-8.831	-17.958	29.487	1.00	24.12	A	C
ATOM	846	CB	SER	298	-9.896	-17.013	28.943	1.00	25.96	A	C
ATOM	847	OG	SER	298	-9.290	-15.848	28.415	1.00	27.27	A	O
ATOM	848	C	SER	298	-9.475	-19.026	30.353	1.00	25.48	A	C
ATOM	849	O	SER	298	-9.859	-18.759	31.491	1.00	27.76	A	O
ATOM	850	N	LYS	299	-9.614	-20.226	29.810	1.00	27.32	A	N
ATOM	851	CA	LYS	299	-10.200	-21.346	30.539	1.00	29.80	A	C
ATOM	852	CB	LYS	299	-10.704	-22.369	29.522	1.00	33.25	A	C
ATOM	853	CG	LYS	299	-12.144	-22.789	29.665	1.00	38.70	A	C
ATOM	854	CD	LYS	299	-13.095	-21.640	29.413	1.00	41.29	A	C
ATOM	855	CE	LYS	299	-14.523	-22.148	29.304	1.00	43.22	A	C
ATOM	856	NZ	LYS	299	-14.727	-22.959	28.065	1.00	43.67	A	N
ATOM	857	C	LYS	299	-9.152	-22.007	31.465	1.00	31.06	A	C
ATOM	858	O	LYS	299	-9.493	-22.817	32.332	1.00	30.65	A	O
ATOM	859	N	CYS	300	-7.880	-21.665	31.254	1.00	31.15	A	N
ATOM	860	CA	CYS	300	-6.760	-22.213	32.019	1.00	31.69	A	C
ATOM	861	CB	CYS	300	-5.447	-21.979	31.266	1.00	30.00	A	C
ATOM	862	SG	CYS	300	-5.338	-22.677	29.608	1.00	32.29	A	S
ATOM	863	C	CYS	300	-6.613	-21.635	33.422	1.00	32.89	A	C
ATOM	864	O	CYS	300	-6.860	-20.451	33.645	1.00	34.74	A	O
ATOM	865	N	ASP	301	-6.129	-22.459	34.349	1.00	35.20	A	N
ATOM	866	CA	ASP	301	-5.930	-22.031	35.731	1.00	35.20	A	C
ATOM	867	CB	ASP	301	-6.915	-22.733	36.664	1.00	37.61	A	C
ATOM	868	CG	ASP	301	-6.846	-22.203	38.091	1.00	42.90	A	C
ATOM	869	OD1	ASP	301	-6.602	-20.992	38.263	1.00	47.21	A	O
ATOM	870	OD2	ASP	301	-7.032	-22.992	39.045	1.00	45.17	A	O
ATOM	871	C	ASP	301	-4.500	-22.299	36.196	1.00	34.45	A	C
ATOM	872	O	ASP	301	-4.136	-23.435	36.515	1.00	32.72	A	O
ATOM	873	N	PHE	302	-3.710	-21.233	36.266	1.00	32.23	A	N
ATOM	874	CA	PHE	302	-2.309	-21.316	36.671	1.00	29.70	A	C
ATOM	875	CB	PHE	302	-1.457	-20.340	35.836	1.00	25.29	A	C
ATOM	876	CG	PHE	302	-1.630	-20.471	34.341	1.00	19.49	A	C
ATOM	877	CD1	PHE	302	-0.809	-21.318	33.599	1.00	17.73	A	C
ATOM	878	CD2	PHE	302	-2.581	-19.712	33.672	1.00	17.12	A	C
ATOM	879	CE1	PHE	302	-0.929	-21.407	32.206	1.00	17.56	A	C
ATOM	880	CE2	PHE	302	-2.713	-19.790	32.283	1.00	18.63	A	C
ATOM	881	CZ	PHE	302	-1.880	-20.642	31.544	1.00	18.19	A	C
ATOM	882	C	PHE	302	-2.111	-20.973	38.150	1.00	30.24	A	C
ATOM	883	O	PHE	302	-0.972	-20.874	38.608	1.00	31.85	A	O
ATOM	884	N	THR	303	-3.199	-20.800	38.901	1.00	32.14	A	N
ATOM	885	CA	THR	303	-3.091	-20.419	40.320	1.00	33.58	A	C
ATOM	886	CB	THR	303	-4.461	-20.335	41.032	1.00	33.65	A	C
ATOM	887	OG1	THR	303	-5.123	-21.601	40.958	1.00	41.55	A	O
ATOM	888	CG2	THR	303	-5.327	-19.263	40.398	1.00	34.48	A	C
ATOM	889	C	THR	303	-2.149	-21.257	41.174	1.00	30.82	A	C
ATOM	890	O	THR	303	-1.300	-20.704	41.864	1.00	31.23	A	O
ATOM	891	N	GLN	304	-2.290	-22.578	41.130	1.00	28.54	A	N
ATOM	892	CA	GLN	304	-1.422	-23.443	41.922	1.00	30.98	A	C
ATOM	893	CB	GLN	304	-1.908	-24.895	41.894	1.00	33.82	A	C
ATOM	894	CG	GLN	304	-3.122	-25.163	42.770	1.00	40.21	A	C
ATOM	895	CD	GLN	304	-3.258	-26.633	43.152	1.00	44.51	A	C
ATOM	896	OE1	GLN	304	-2.260	-27.352	43.284	1.00	44.03	A	O
ATOM	897	NE2	GLN	304	-4.495	-27.083	43.344	1.00	45.76	A	N
ATOM	898	C	GLN	304	0.041	-23.365	41.491	1.00	28.96	A	C
ATOM	899	O	GLN	304	0.945	-23.455	42.319	1.00	28.32	A	O
ATOM	900	N	MET	305	0.277	-23.217	40.193	1.00	29.68	A	N
ATOM	901	CA	MET	305	1.642	-23.111	39.700	1.00	30.25	A	C
ATOM	902	CB	MET	305	1.662	-23.140	38.178	1.00	31.41	A	C
ATOM	903	CG	MET	305	1.239	-24.487	37.614	1.00	35.66	A	C
ATOM	904	SD	MET	305	1.164	-24.512	35.825	1.00	43.01	A	S
ATOM	905	CE	MET	305	2.787	-24.033	35.443	1.00	35.36	A	C
ATOM	906	C	MET	305	2.247	-21.820	40.235	1.00	30.83	A	C
ATOM	907	O	MET	305	3.356	-21.821	40.776	1.00	30.58	A	O
ATOM	908	N	SER	306	1.456	-20.751	40.194	1.00	27.73	A	N
ATOM	909	CA	SER	306	1.902	-19.458	40.677	1.00	30.77	A	C
ATOM	910	CB	SER	306	0.835	-18.400	40.409	1.00	29.22	A	C
ATOM	911	OG	SER	306	1.293	-17.132	40.818	1.00	34.97	A	O
ATOM	912	C	SER	306	2.265	-19.489	42.163	1.00	31.29	A	C

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ATOM	913	O	SER	306	3.311	-18.970	42.557	1.00	30.66	A	O
ATOM	914	N	GLN	307	1.405	-20.103	42.977	1.00	32.59	A	N
ATOM	915	CA	GLN	307	1.634	-20.213	44.422	1.00	33.86	A	C
ATOM	916	CB	GLN	307	0.431	-20.867	45.113	1.00	37.65	A	C
ATOM	917	CG	GLN	307	-0.863	-20.067	45.057	1.00	45.05	A	C
ATOM	918	CD	GLN	307	-2.030	-20.788	45.727	1.00	49.19	A	C
ATOM	919	OE1	GLN	307	-2.191	-22.003	45.587	1.00	51.43	A	O
ATOM	920	NE2	GLN	307	-2.852	-20.037	46.456	1.00	50.59	A	N
ATOM	921	C	GLN	307	2.891	-21.034	44.722	1.00	33.48	A	C
ATOM	922	O	GLN	307	3.673	-20.689	45.606	1.00	33.49	A	O
ATOM	923	N	TYR	308	3.078	-22.122	43.978	1.00	33.32	A	N
ATOM	924	CA	TYR	308	4.233	-22.986	44.161	1.00	31.14	A	C
ATOM	925	CB	TYR	308	4.183	-24.160	43.185	1.00	30.63	A	C
ATOM	926	CG	TYR	308	5.455	-24.973	43.147	1.00	32.26	A	C
ATOM	927	CD1	TYR	308	6.264	-24.982	42.014	1.00	34.01	A	C
ATOM	928	CE1	TYR	308	7.443	-25.721	41.978	1.00	35.74	A	C
ATOM	929	CD2	TYR	308	5.858	-25.726	44.247	1.00	32.89	A	C
ATOM	930	CE2	TYR	308	7.038	-26.469	44.221	1.00	32.55	A	C
ATOM	931	CZ	TYR	308	7.821	-26.460	43.087	1.00	34.77	A	C
ATOM	932	OH	TYR	308	8.988	-27.183	43.056	1.00	41.45	A	O
ATOM	933	C	TYR	308	5.531	-22.209	43.981	1.00	30.63	A	C
ATOM	934	O	TYR	308	6.410	-22.253	44.836	1.00	29.40	A	O
ATOM	935	N	PHE	309	5.643	-21.486	42.874	1.00	30.20	A	N
ATOM	936	CA	PHE	309	6.842	-20.705	42.621	1.00	29.85	A	C
ATOM	937	CB	PHE	309	6.814	-20.125	41.211	1.00	27.00	A	C
ATOM	938	CG	PHE	309	6.947	-21.174	40.149	1.00	26.90	A	C
ATOM	939	CD1	PHE	309	8.081	-21.979	40.097	1.00	29.24	A	C
ATOM	940	CD2	PHE	309	5.919	-21.411	39.250	1.00	27.66	A	C
ATOM	941	CE1	PHE	309	8.189	-23.012	39.166	1.00	28.55	A	C
ATOM	942	CE2	PHE	309	6.014	-22.440	38.315	1.00	28.99	A	C
ATOM	943	CZ	PHE	309	7.156	-23.243	38.276	1.00	28.22	A	C
ATOM	944	C	PHE	309	7.114	-19.657	43.696	1.00	31.33	A	C
ATOM	945	O	PHE	309	8.266	-19.452	44.077	1.00	32.00	A	O
ATOM	946	N	LYS	310	6.063	-19.033	44.225	1.00	33.42	A	N
ATOM	947	CA	LYS	310	6.241	-18.053	45.300	1.00	36.40	A	C
ATOM	948	CB	LYS	310	4.939	-17.317	45.629	1.00	37.08	A	C
ATOM	949	CG	LYS	310	4.515	-16.297	44.595	1.00	40.91	A	C
ATOM	950	CD	LYS	310	3.211	-15.631	45.000	1.00	45.34	A	C
ATOM	951	CE	LYS	310	2.633	-14.800	43.862	1.00	47.47	A	C
ATOM	952	NZ	LYS	310	1.283	-14.259	44.209	1.00	48.99	A	N
ATOM	953	C	LYS	310	6.741	-18.772	46.547	1.00	36.11	A	C
ATOM	954	O	LYS	310	7.563	-18.237	47.282	1.00	38.87	A	O
ATOM	955	N	ALA	311	6.260	-19.996	46.761	1.00	35.89	A	N
ATOM	956	CA	ALA	311	6.664	-20.806	47.912	1.00	35.63	A	C
ATOM	957	CB	ALA	311	5.805	-22.055	48.005	1.00	34.83	A	C
ATOM	958	C	ALA	311	8.145	-21.189	47.833	1.00	36.15	A	C
ATOM	959	O	ALA	311	8.827	-21.257	48.852	1.00	34.85	A	O
ATOM	960	N	GLN	312	8.628	-21.454	46.621	1.00	36.99	A	N
ATOM	961	CA	GLN	312	10.027	-21.806	46.414	1.00	41.24	A	C
ATOM	962	CB	GLN	312	10.259	-22.304	44.985	1.00	43.01	A	C
ATOM	963	CG	GLN	312	9.545	-23.610	44.667	1.00	48.70	A	C
ATOM	964	CD	GLN	312	9.904	-24.735	45.634	1.00	53.83	A	C
ATOM	965	OE1	GLN	312	10.842	-25.502	45.392	1.00	56.32	A	O
ATOM	966	NE2	GLN	312	9.150	-24.844	46.730	1.00	54.44	A	N
ATOM	967	C	GLN	312	10.919	-20.604	46.705	1.00	42.12	A	C
ATOM	968	O	GLN	312	12.006	-20.752	47.261	1.00	42.64	A	O
ATOM	969	N	THR	313	10.434	-19.414	46.360	1.00	42.92	A	N
ATOM	970	CA	THR	313	11.175	-18.177	46.596	1.00	45.02	A	C
ATOM	971	CB	THR	313	10.475	-16.965	45.930	1.00	43.47	A	C
ATOM	972	OG1	THR	313	10.367	-17.198	44.520	1.00	43.09	A	O
ATOM	973	CG2	THR	313	11.267	-15.682	46.158	1.00	43.27	A	C
ATOM	974	C	THR	313	11.316	-17.949	48.103	1.00	46.33	A	C
ATOM	975	O	THR	313	12.360	-17.493	48.577	1.00	46.22	A	O
ATOM	976	N	GLU	314	10.264	-18.280	48.848	1.00	48.60	A	N
ATOM	977	CA	GLU	314	10.276	-18.142	50.302	1.00	52.92	A	C
ATOM	978	CB	GLU	314	8.869	-18.329	50.871	1.00	56.39	A	C
ATOM	979	CG	GLU	314	7.980	-17.092	50.794	1.00	62.65	A	C
ATOM	980	CD	GLU	314	8.241	-16.101	51.924	1.00	66.00	A	C
ATOM	981	OE1	GLU	314	7.301	-15.823	52.704	1.00	66.76	A	O
ATOM	982	OE2	GLU	314	9.381	-15.596	52.031	1.00	67.91	A	O
ATOM	983	C	GLU	314	11.220	-19.173	50.916	1.00	53.35	A	C
ATOM	984	O	GLU	314	12.034	-18.849	51.778	1.00	52.35	A	O
ATOM	985	N	ALA	315	11.129	-20.409	50.437	1.00	55.28	A	N
ATOM	986	CA	ALA	315	11.974	-21.489	50.931	1.00	58.11	A	C
ATOM	987	CB	ALA	315	11.577	-22.804	50.284	1.00	58.11	A	C
ATOM	988	C	ALA	315	13.455	-21.208	50.693	1.00	60.19	A	C

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ATOM	989	O	ALA	315	14.294	-21.535	51.535	1.00	60.92	A	O
ATOM	990	N	ARG	316	13.770	-20.586	49.557	1.00	61.65	A	N
ATOM	991	CA	ARG	316	15.154	-20.264	49.219	1.00	62.68	A	C
ATOM	992	CB	ARG	316	15.274	-19.820	47.757	1.00	62.85	A	C
ATOM	993	C3	ARG	316	15.160	-20.978	46.765	1.00	64.85	A	C
ATOM	994	CD	ARG	316	15.393	-20.548	45.323	1.00	66.26	A	C
ATOM	995	NE	ARG	316	14.346	-19.657	44.826	1.00	68.35	A	N
ATOM	996	CZ	ARG	316	14.501	-18.351	44.627	1.00	69.36	A	C
ATOM	997	NH1	ARG	316	13.489	-17.625	44.172	1.00	71.07	A	N
ATOM	998	NH2	ARG	316	15.666	-17.767	44.887	1.00	69.27	A	N
ATOM	999	C	ARG	316	15.794	-19.238	50.152	1.00	63.33	A	C
ATOM	1000	O	ARG	316	16.973	-19.354	50.480	1.00	62.64	A	O
ATOM	1001	N	LYS	317	15.024	-18.250	50.598	1.00	63.88	A	N
ATOM	1002	CA	LYS	317	15.572	-17.247	51.504	1.00	65.99	A	C
ATOM	1003	CB	LYS	317	14.808	-15.919	51.401	1.00	64.98	A	C
ATOM	1004	CG	LYS	317	13.314	-16.018	51.605	1.00	64.56	A	C
ATOM	1005	CD	LYS	317	12.676	-14.639	51.698	1.00	65.83	A	C
ATOM	1006	CE	LYS	317	13.083	-13.925	52.983	1.00	66.61	A	C
ATOM	1007	NZ	LYS	317	12.358	-12.636	53.174	1.00	67.87	A	N
ATOM	1008	C	LYS	317	15.594	-17.757	52.943	1.00	68.08	A	C
ATOM	1009	O	LYS	317	15.770	-16.985	53.886	1.00	68.38	A	O
ATOM	1010	N	GLN	318	15.438	-19.071	53.096	1.00	69.91	A	N
ATOM	1011	CA	GLN	318	15.443	-19.716	54.406	1.00	71.23	A	C
ATOM	1012	CB	GLN	318	14.049	-20.259	54.739	1.00	71.39	A	C
ATOM	1013	CG	GLN	318	12.975	-19.191	54.899	1.00	72.92	A	C
ATOM	1014	CD	GLN	318	13.174	-18.330	56.135	1.00	73.79	A	C
ATOM	1015	OE1	GLN	318	12.508	-18.521	57.154	1.00	73.53	A	O
ATOM	1016	NE2	GLN	318	14.087	-17.370	56.047	1.00	73.33	A	N
ATOM	1017	C	GLN	318	16.466	-20.849	54.466	1.00	71.82	A	C
ATOM	1018	O	GLN	318	16.510	-21.597	55.444	1.00	70.99	A	O
ATOM	1019	N	MET	319	17.281	-20.972	53.419	1.00	73.46	A	N
ATOM	1020	CA	MET	319	18.312	-22.009	53.347	1.00	75.82	A	C
ATOM	1021	CB	MET	319	19.031	-21.972	51.996	1.00	77.12	A	C
ATOM	1022	CG	MET	319	18.210	-22.400	50.805	1.00	79.59	A	C
ATOM	1023	SD	MET	319	19.247	-22.474	49.323	1.00	83.03	A	S
ATOM	1024	CE	MET	319	19.246	-20.752	48.801	1.00	82.52	A	C
ATOM	1025	C	MET	319	19.360	-21.854	54.444	1.00	76.81	A	C
ATOM	1026	O	MET	319	19.499	-20.785	55.040	1.00	77.16	A	O
ATOM	1027	N	SER	320	20.114	-22.924	54.681	1.00	77.85	A	N
ATOM	1028	CA	SER	320	21.169	-22.923	55.692	1.00	79.46	A	C
ATOM	1029	CB	SER	320	21.510	-24.360	56.094	1.00	78.40	A	C
ATOM	1030	OG	SER	320	22.081	-25.071	55.007	1.00	77.32	A	O
ATOM	1031	C	SER	320	22.424	-22.245	55.145	1.00	80.81	A	C
ATOM	1032	O	SER	320	22.499	-21.935	53.953	1.00	80.33	A	O
ATOM	1033	N	LYS	321	23.399	-21.999	56.018	1.00	82.21	A	N
ATOM	1034	CA	LYS	321	24.655	-21.387	55.592	1.00	83.94	A	C
ATOM	1035	CB	LYS	321	25.481	-20.908	56.789	1.00	84.26	A	C
ATOM	1036	CG	LYS	321	25.090	-19.535	57.313	1.00	84.67	A	C
ATOM	1037	CD	LYS	321	26.248	-18.884	58.056	1.00	84.89	A	C
ATOM	1038	CE	LYS	321	27.433	-18.642	57.123	1.00	85.67	A	C
ATOM	1039	NZ	LYS	321	28.598	-18.026	57.818	1.00	86.36	A	N
ATOM	1040	C	LYS	321	25.461	-22.398	54.781	1.00	84.47	A	C
ATOM	1041	O	LYS	321	26.325	-22.023	53.988	1.00	84.60	A	O
ATOM	1042	N	GLU	322	25.166	-23.679	54.992	1.00	84.67	A	N
ATOM	1043	CA	GLU	322	25.835	-24.766	54.289	1.00	84.83	A	C
ATOM	1044	CB	GLU	322	25.519	-26.114	54.953	1.00	86.84	A	C
ATOM	1045	CG	GLU	322	26.053	-26.281	56.382	1.00	88.92	A	C
ATOM	1046	CD	GLU	322	25.392	-25.345	57.385	1.00	89.97	A	C
ATOM	1047	OE1	GLU	322	24.201	-25.551	57.701	1.00	90.32	A	O
ATOM	1048	OE2	GLU	322	26.067	-24.404	57.858	1.00	90.87	A	O
ATOM	1049	C	GLU	322	25.368	-24.784	52.838	1.00	84.02	A	C
ATOM	1050	O	GLU	322	26.181	-24.868	51.915	1.00	85.02	A	O
ATOM	1051	N	GLU	323	24.052	-24.700	52.647	1.00	82.39	A	N
ATOM	1052	CA	GLU	323	23.456	-24.693	51.314	1.00	80.27	A	C
ATOM	1053	CB	GLU	323	21.928	-24.730	51.416	1.00	81.58	A	C
ATOM	1054	CG	GLU	323	21.354	-26.051	51.916	1.00	83.63	A	C
ATOM	1055	CD	GLU	323	21.223	-27.097	50.819	1.00	85.02	A	C
ATOM	1056	OE1	GLU	323	20.104	-27.625	50.639	1.00	84.92	A	O
ATOM	1057	OE2	GLU	323	22.231	-27.394	50.139	1.00	85.51	A	O
ATOM	1058	C	GLU	323	23.887	-23.452	50.541	1.00	77.92	A	C
ATOM	1059	O	GLU	323	24.435	-23.557	49.447	1.00	77.18	A	O
ATOM	1060	N	LYS	324	23.662	-22.285	51.142	1.00	75.77	A	N
ATOM	1061	CA	LYS	324	24.008	-21.000	50.543	1.00	74.24	A	C
ATOM	1062	CB	LYS	324	23.650	-19.859	51.498	1.00	74.51	A	C
ATOM	1063	CG	LYS	324	22.284	-19.237	51.251	1.00	75.27	A	C
ATOM	1064	CD	LYS	324	22.254	-18.468	49.933	1.00	76.96	A	C

ATOM	1065	CE	LYS	324	23.245	-17.301	49.940	1.00	78.30	A	C
ATOM	1066	NZ	LYS	324	23.272	-16.559	48.646	1.00	77.73	A	N
ATOM	1067	C	LYS	324	25.468	-20.883	50.119	1.00	73.46	A	C
ATOM	1068	O	LYS	324	25.764	-20.450	49.002	1.00	73.42	A	O
ATOM	1069	N	LEU	325	26.376	-21.270	51.008	1.00	72.15	A	N
ATOM	1070	CA	LEU	325	27.804	-21.203	50.719	1.00	71.88	A	C
ATOM	1071	CB	LEU	325	28.617	-21.520	51.976	1.00	72.28	A	C
ATOM	1072	CG	LEU	325	30.128	-21.290	51.928	1.00	72.31	A	C
ATOM	1073	CD1	LEU	325	30.431	-19.832	51.609	1.00	72.00	A	C
ATOM	1074	CD2	LEU	325	30.742	-21.685	53.262	1.00	73.61	A	C
ATOM	1075	C	LEU	325	28.178	-22.165	49.594	1.00	71.69	A	C
ATOM	1076	O	LEU	325	28.990	-21.833	48.727	1.00	71.92	A	O
ATOM	1077	N	LYS	326	27.569	-23.349	49.604	1.00	70.17	A	N
ATOM	1078	CA	LYS	326	27.834	-24.355	48.583	1.00	69.39	A	C
ATOM	1079	CB	LYS	326	27.081	-25.650	48.900	1.00	70.79	A	C
ATOM	1080	CG	LYS	326	27.305	-26.760	47.885	1.00	71.25	A	C
ATOM	1081	CD	LYS	326	26.446	-27.979	48.175	1.00	72.00	A	C
ATOM	1082	CE	LYS	326	26.661	-29.067	47.130	1.00	72.80	A	C
ATOM	1083	NZ	LYS	326	26.331	-28.608	45.743	1.00	71.96	A	N
ATOM	1084	C	LYS	326	27.435	-23.848	47.198	1.00	68.40	A	C
ATOM	1085	O	LYS	326	28.166	-24.039	46.228	1.00	68.96	A	O
ATOM	1086	N	ILE	327	26.281	-23.189	47.116	1.00	67.32	A	N
ATOM	1087	CA	ILE	327	25.788	-22.651	45.850	1.00	66.21	A	C
ATOM	1088	CB	ILE	327	24.362	-22.062	46.001	1.00	65.76	A	C
ATOM	1089	CG2	ILE	327	23.895	-21.441	44.684	1.00	63.97	A	C
ATOM	1090	CG1	ILE	327	23.385	-23.158	46.438	1.00	65.03	A	C
ATOM	1091	CD1	ILE	327	21.976	-22.666	46.686	1.00	64.28	A	C
ATOM	1092	C	ILE	327	26.736	-21.577	45.322	1.00	65.91	A	C
ATOM	1093	O	ILE	327	26.940	-21.458	44.114	1.00	65.99	A	O
ATOM	1094	N	LYS	328	27.329	-20.817	46.239	1.00	65.08	A	N
ATOM	1095	CA	LYS	328	28.263	-19.757	45.884	1.00	64.57	A	C
ATOM	1096	CB	LYS	328	28.515	-18.855	47.097	1.00	65.47	A	C
ATOM	1097	CG	LYS	328	29.487	-17.711	46.849	1.00	66.12	A	C
ATOM	1098	CD	LYS	328	29.375	-16.640	47.925	1.00	66.46	A	C
ATOM	1099	CE	LYS	328	27.998	-15.987	47.898	1.00	67.93	A	C
ATOM	1100	NZ	LYS	328	27.888	-14.854	48.856	1.00	69.06	A	N
ATOM	1101	C	LYS	328	29.577	-20.329	45.352	1.00	64.65	A	C
ATOM	1102	O	LYS	328	30.197	-19.740	44.469	1.00	63.64	A	O
ATOM	1103	N	GLU	329	29.982	-21.488	45.873	1.00	65.11	A	N
ATOM	1104	CA	GLU	329	31.216	-22.136	45.437	1.00	65.80	A	C
ATOM	1105	CB	GLU								

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ATOM	1141	CG	LYS	333	32.876	-24.840	40.471	1.00	58.97	A	C
ATOM	1142	CD	LYS	333	32.989	-26.294	40.910	1.00	61.54	A	C
ATOM	1143	CE	LYS	333	31.676	-27.036	40.704	1.00	64.09	A	C
ATOM	1144	NZ	LYS	333	31.766	-28.469	41.109	1.00	65.24	A	N
ATOM	1145	C	LYS	333	33.755	-22.709	38.557	1.00	50.20	A	C
ATOM	1146	O	LYS	333	34.476	-23.103	37.639	1.00	50.65	A	O
ATOM	1147	N	LEU	334	32.519	-22.267	38.359	1.00	47.21	A	N
ATOM	1148	CA	LEU	334	31.948	-22.195	37.024	1.00	44.81	A	C
ATOM	1149	CB	LEU	334	30.427	-22.074	37.112	1.00	45.03	A	C
ATOM	1150	CG	LEU	334	29.615	-22.477	35.883	1.00	43.96	A	C
ATOM	1151	CD1	LEU	334	29.955	-23.901	35.479	1.00	43.76	A	C
ATOM	1152	CD2	LEU	334	28.129	-22.350	36.189	1.00	46.03	A	C
ATOM	1153	C	LEU	334	32.560	-20.967	36.342	1.00	44.13	A	C
ATOM	1154	O	LEU	334	32.867	-20.988	35.151	1.00	41.16	A	O
ATOM	1155	N	LEU	335	32.782	-19.923	37.135	1.00	43.60	A	N
ATOM	1156	CA	LEU	335	33.379	-18.682	36.658	1.00	44.76	A	C
ATOM	1157	CB	LEU	335	33.239	-17.595	37.735	1.00	45.53	A	C
ATOM	1158	CG	LEU	335	33.821	-16.180	37.593	1.00	47.91	A	C
ATOM	1159	CD1	LEU	335	35.275	-16.162	38.030	1.00	49.30	A	C
ATOM	1160	CD2	LEU	335	33.645	-15.630	36.175	1.00	45.56	A	C
ATOM	1161	C	LEU	335	34.846	-18.887	36.266	1.00	45.55	A	C
ATOM	1162	O	LEU	335	35.293	-18.348	35.262	1.00	45.89	A	O
ATOM	1163	N	LYS	336	35.579	-19.696	37.030	1.00	47.17	A	N
ATOM	1164	CA	LYS	336	36.991	-19.948	36.734	1.00	48.73	A	C
ATOM	1165	CB	LYS	336	37.699	-20.678	37.888	1.00	52.53	A	C
ATOM	1166	CG	LYS	336	37.239	-20.355	39.305	1.00	56.12	A	C
ATOM	1167	CD	LYS	336	37.453	-18.905	39.703	1.00	59.90	A	C
ATOM	1168	CE	LYS	336	36.973	-18.676	41.137	1.00	61.71	A	C
ATOM	1169	NZ	LYS	336	36.970	-17.236	41.527	1.00	63.01	A	N
ATOM	1170	C	LYS	336	37.129	-20.810	35.485	1.00	47.68	A	C
ATOM	1171	O	LYS	336	38.050	-20.627	34.687	1.00	49.41	A	O
ATOM	1172	N	GLU	337	36.221	-21.769	35.336	1.00	45.02	A	N
ATOM	1173	CA	GLU	337	36.247	-22.683	34.205	1.00	42.81	A	C
ATOM	1174	CB	GLU	337	35.484	-23.970	34.548	1.00	49.42	A	C
ATOM	1175	CG	GLU	337	36.331	-25.108	35.136	1.00	55.65	A	C
ATOM	1176	CD	GLU	337	36.877	-24.813	36.528	1.00	58.99	A	C
ATOM	1177	OE1	GLU	337	37.888	-24.083	36.639	1.00	61.19	A	O
ATOM	1178	OE2	GLU	337	36.308	-25.331	37.512	1.00	61.21	A	O
ATOM	1179	C	GLU	337	35.728	-22.133	32.883	1.00	39.24	A	C
ATOM	1180	O	GLU	337	36.307	-22.413	31.835	1.00	39.68	A	O
ATOM	1181	N	TYR	338	34.656	-21.340	32.930	1.00	34.16	A	N
ATOM	1182	CA	TYR	338	34.043	-20.803	31.714	1.00	30.73	A	C
ATOM	1183	CB	TYR	338	32.609	-21.328	31.590	1.00	31.52	A	C
ATOM	1184	CG	TYR	338	32.519	-22.826	31.457	1.00	35.38	A	C
ATOM	1185	CD1	TYR	338	32.467	-23.428	30.202	1.00	34.11	A	C
ATOM	1186	CE1	TYR	338	32.426	-24.804	30.067	1.00	37.78	A	C
ATOM	1187	CD2	TYR	338	32.522	-23.647	32.585	1.00	36.28	A	C
ATOM	1188	CE2	TYR	338	32.480	-25.030	32.465	1.00	37.32	A	C
ATOM	1189	CZ	TYR	338	32.435	-25.602	31.201	1.00	39.62	A	C
ATOM	1190	OH	TYR	338	32.419	-26.971	31.061	1.00	42.92	A	O
ATOM	1191	C	TYR	338	34.025	-19.289	31.547	1.00	27.60	A	C
ATOM	1192	O	TYR	338	33.740	-18.797	30.461	1.00	28.16	A	O
ATOM	1193	N	GLY	339	34.319	-18.555	32.615	1.00	27.60	A	N
ATOM	1194	CA	GLY	339	34.308	-17.104	32.552	1.00	24.22	A	C
ATOM	1195	C	GLY	339	35.530	-16.439	31.948	1.00	24.75	A	C
ATOM	1196	O	GLY	339	35.586	-15.215	31.886	1.00	24.07	A	O
ATOM	1197	N	PHE	340	36.490	-17.225	31.464	1.00	23.97	A	N
ATOM	1198	CA	PHE	340	37.700	-16.658	30.879	1.00	23.51	A	C
ATOM	1199	CB	PHE	340	38.907	-16.879	31.791	1.00	22.82	A	C
ATOM	1200	CG	PHE	340	38.834	-16.137	33.095	1.00	23.12	A	C
ATOM	1201	CD1	PHE	340	38.144	-16.673	34.175	1.00	22.37	A	C
ATOM	1202	CD2	PHE	340	39.479	-14.918	33.251	1.00	22.75	A	C
ATOM	1203	CE1	PHE	340	38.099	-16.008	35.397	1.00	23.53	A	C
ATOM	1204	CE2	PHE	340	39.442	-14.243	34.466	1.00	24.29	A	C
ATOM	1205	CZ	PHE	340	38.749	-14.792	35.544	1.00	22.91	A	C
ATOM	1206	C	PHE	340	38.025	-17.217	29.515	1.00	23.95	A	C
ATOM	1207	O	PHE	340	37.623	-18.324	29.166	1.00	24.93	A	O
ATOM	1208	N	CYS	341	38.759	-16.429	28.742	1.00	23.26	A	N
ATOM	1209	CA	CYS	341	39.184	-16.831	27.411	1.00	25.25	A	C
ATOM	1210	CB	CYS	341	38.278	-16.235	26.345	1.00	23.32	A	C
ATOM	1211	SG	CYS	341	38.731	-14.560	25.954	1.00	39.67	A	S
ATOM	1212	C	CYS	341	40.582	-16.296	27.184	1.00	24.90	A	C
ATOM	1213	O	CYS	341	40.980	-15.291	27.777	1.00	25.02	A	O
ATOM	1214	N	ILE	342	41.301	-16.931	26.272	1.00	24.59	A	N
ATOM	1215	CA	ILE	342	42.649	-16.500	25.942	1.00	22.78	A	C
ATOM	1216	CB	ILE	342	43.622	-17.694	25.799	1.00	21.57	A	C



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ATOM	1217	CG2	ILE	342	45.048	-17.186	25.683	1.00	21.22	A	C
ATOM	1218	CG1	ILE	342	43.485	-18.642	26.988	1.00	19.46	A	C
ATOM	1219	CD1	ILE	342	43.745	-17.991	28.315	1.00	19.75	A	C
ATOM	1220	C	ILE	342	42.585	-15.819	24.600	1.00	22.38	A	C
ATOM	1221	O	ILE	342	42.101	-16.400	23.637	1.00	26.05	A	O
ATOM	1222	N	MET	343	43.027	-14.575	24.547	1.00	22.29	A	N
ATOM	1223	CA	MET	343	43.066	-13.843	23.297	1.00	26.66	A	C
ATOM	1224	CB	MET	343	42.015	-12.727	23.265	1.00	26.06	A	C
ATOM	1225	CG	MET	343	42.044	-11.941	21.966	1.00	28.28	A	C
ATOM	1226	SD	MET	343	40.750	-10.711	21.784	1.00	29.35	A	S
ATOM	1227	CE	MET	343	39.375	-11.748	21.209	1.00	28.69	A	C
ATOM	1228	C	MET	343	44.463	-13.250	23.187	1.00	25.22	A	C
ATOM	1229	O	MET	343	44.863	-12.465	24.033	1.00	27.89	A	O
ATOM	1230	N	ASP	344	45.223	-13.699	22.192	1.00	30.80	A	N
ATOM	1231	CA	ASP	344	46.589	-13.220	21.945	1.00	33.01	A	C
ATOM	1232	CB	ASP	344	46.557	-11.868	21.231	1.00	32.95	A	C
ATOM	1233	CG	ASP	344	45.920	-11.934	19.880	1.00	37.89	A	C
ATOM	1234	OD1	ASP	344	46.012	-12.983	19.216	1.00	40.35	A	O
ATOM	1235	OD2	ASP	344	45.340	-10.911	19.475	1.00	43.48	A	O
ATOM	1236	C	ASP	344	47.474	-13.019	23.166	1.00	33.62	A	C
ATOM	1237	O	ASP	344	47.522	-11.927	23.691	1.00	40.90	A	O
ATOM	1238	N	ASN	345	48.183	-14.027	23.635	1.00	31.05	A	N
ATOM	1239	CA	ASN	345	49.086	-13.797	24.772	1.00	26.53	A	C
ATOM	1240	CB	ASN	345	50.109	-12.688	24.439	1.00	28.57	A	C
ATOM	1241	CG	ASN	345	50.629	-12.768	23.008	1.00	28.69	A	C
ATOM	1242	OD1	ASN	345	50.433	-11.846	22.226	1.00	32.68	A	O
ATOM	1243	ND2	ASN	345	51.257	-13.878	22.655	1.00	20.16	A	N
ATOM	1244	C	ASN	345	48.480	-13.496	26.140	1.00	21.60	A	C
ATOM	1245	O	ASN	345	49.198	-13.531	27.131	1.00	20.22	A	O
ATOM	1246	N	HIS	346	47.198	-13.152	26.215	1.00	17.91	A	N
ATOM	1247	CA	HIS	346	46.595	-12.866	27.521	1.00	18.74	A	C
ATOM	1248	CB	HIS	346	46.437	-11.360	27.751	1.00	17.64	A	C
ATOM	1249	CG	HIS	346	47.733	-10.624	27.844	1.00	19.52	A	C
ATOM	1250	CD2	HIS	346	48.525	-10.092	26.886	1.00	14.17	A	C
ATOM	1251	ND1	HIS	346	48.371	-10.393	29.043	1.00	21.27	A	N
ATOM	1252	CE1	HIS	346	49.501	-9.753	28.821	1.00	17.28	A	C
ATOM	1253	NE2	HIS	346	49.617	-9.556	27.519	1.00	21.66	A	N
ATOM	1254	C	HIS	346	45.246	-13.525	27.794	1.00	19.08	A	C
ATOM	1255	O	HIS	346	44.465	-13.782	26.885	1.00	19.00	A	O
ATOM	1256	N	LYS	347	44.985	-13.751	29.073	1.00	18.73	A	N
ATOM	1257	CA	LYS	347	43.743	-14.331	29.547	1.00	21.96	A	C
ATOM	1258	CB	LYS	347	44.012	-15.148	30.809	1.00	22.15	A	C
ATOM	1259	CG	LYS	347	42.762	-15.610	31.528	1.00	30.07	A	C
ATOM	1260	CD	LYS	347	43.085	-16.576	32.652	1.00	32.25	A	C
ATOM	1261	CE	LYS	347	43.362	-17.969	32.105	1.00	37.37	A	C
ATOM	1262	NZ	LYS	347	43.800	-18.918	33.174	1.00	40.77	A	N
ATOM	1263	C	LYS	347	42.823	-13.158	29.880	1.00	25.39	A	C
ATOM	1264	O	LYS	347	43.230	-12.236	30.579	1.00	26.44	A	O
ATOM	1265	N	GLU	348	41.610	-13.163	29.345	1.00	25.66	A	N
ATOM	1266	CA	GLU	348	40.660	-12.082	29.612	1.00	28.43	A	C
ATOM	1267	CB	GLU	348	40.609	-11.109	28.439	1.00	34.56	A	C
ATOM	1268	CG	GLU	348	41.852	-10.208	28.372	1.00	45.72	A	C
ATOM	1269	CD	GLU	348	41.787	-9.156	27.275	1.00	50.02	A	C
ATOM	1270	OE1	GLU	348	40.835	-9.186	26.472	1.00	56.18	A	O
ATOM	1271	OE2	GLU	348	42.691	-8.296	27.215	1.00	50.01	A	O
ATOM	1272	C	GLU	348	39.273	-12.589	29.961	1.00	27.82	A	C
ATOM	1273	O	GLU	348	38.845	-13.639	29.481	1.00	25.57	A	O
ATOM	1274	N	ARG	349	38.576	-11.848	30.815	1.00	26.72	A	N
ATOM	1275	CA	ARG	349	37.251	-12.262	31.242	1.00	27.53	A	C
ATOM	1276	CB	ARG	349	36.830	-11.538	32.535	1.00	33.55	A	C
ATOM	1277	CG	ARG	349	35.601	-12.176	33.227	1.00	41.29	A	C
ATOM	1278	CD	ARG	349	35.346	-11.629	34.634	1.00	48.37	A	C
ATOM	1279	NE	ARG	349	36.424	-11.974	35.560	1.00	53.83	A	N
ATOM	1280	CZ	ARG	349	37.077	-11.097	36.319	1.00	55.98	A	C
ATOM	1281	NH1	ARG	349	36.762	-9.809	36.275	1.00	57.79	A	N
ATOM	1282	NH2	ARG	349	38.075	-11.501	37.097	1.00	57.48	A	N
ATOM	1283	C	ARG	349	36.180	-12.126	30.169	1.00	22.30	A	C
ATOM	1284	O	ARG	349	36.216	-11.224	29.340	1.00	19.94	A	O
ATOM	1285	N	ILE	350	35.286	-13.104	30.143	1.00	21.45	A	N
ATOM	1286	CA	ILE	350	34.168	-13.117	29.215	1.00	22.29	A	C
ATOM	1287	CB	ILE	350	33.800	-14.554	28.808	1.00	19.91	A	C
ATOM	1288	CG2	ILE	350	32.735	-14.524	27.726	1.00	16.75	A	C
ATOM	1289	CG1	ILE	350	35.039	-15.275	28.265	1.00	19.48	A	C
ATOM	1290	CD1	ILE	350	34.822	-16.746	27.946	1.00	16.26	A	C
ATOM	1291	C	ILE	350	32.988	-12.494	29.966	1.00	22.97	A	C
ATOM	1292	O	ILE	350	32.723	-12.861	31.112	1.00	23.71	A	O

ATOM	1293	N	ALA	351	32.259	-11.602	29.303	1.00	21.71	A	N
ATOM	1294	CA	ALA	351	31.123	-10.909	29.912	1.00	24.35	A	C
ATOM	1295	CB	ALA	351	30.680	-9.752	29.027	1.00	23.73	A	C
ATOM	1296	C	ALA	351	29.905	-11.738	30.342	1.00	28.59	A	C
ATOM	1297	O	ALA	351	29.603	-11.827	31.541	1.00	35.07	A	O
ATOM	1298	N	ASN	352	29.187	-12.323	29.391	1.00	26.61	A	N
ATOM	1299	CA	ASN	352	27.994	-13.101	29.742	1.00	25.59	A	C
ATOM	1300	CB	ASN	352	26.737	-12.415	29.184	1.00	28.77	A	C
ATOM	1301	CG	ASN	352	26.394	-11.106	29.902	1.00	31.58	A	C
ATOM	1302	OD1	ASN	352	25.397	-11.032	30.619	1.00	37.25	A	O
ATOM	1303	ND2	ASN	352	27.197	-10.067	29.687	1.00	30.84	A	N
ATOM	1304	C	ASN	352	28.103	-14.509	29.169	1.00	25.51	A	C
ATOM	1305	O	ASN	352	27.413	-14.848	28.207	1.00	26.50	A	O
ATOM	1306	N	PHE	353	28.968	-15.326	29.765	1.00	22.65	A	N
ATOM	1307	CA	PHE	353	29.184	-16.689	29.292	1.00	24.40	A	C
ATOM	1308	CB	PHE	353	30.467	-17.272	29.886	1.00	26.13	A	C
ATOM	1309	CG	PHE	353	30.476	-17.326	31.393	1.00	29.09	A	C
ATOM	1310	CD1	PHE	353	30.260	-18.522	32.059	1.00	28.39	A	C
ATOM	1311	CD2	PHE	353	30.734	-16.186	32.141	1.00	28.94	A	C
ATOM	1312	CE1	PHE	353	30.303	-18.582	33.451	1.00	32.38	A	C
ATOM	1313	CE2	PHE	353	30.779	-16.240	33.529	1.00	32.09	A	C
ATOM	1314	CZ	PHE	353	30.564	-17.436	34.183	1.00	31.52	A	C
ATOM	1315	C	PHE	353	28.001	-17.630	29.532	1.00	22.98	A	C
ATOM	1316	O	PHE	353	27.894	-18.667	28.887	1.00	21.34	A	O
ATOM	1317	N	LYS	354	27.141	-17.280	30.483	1.00	24.07	A	N
ATOM	1318	CA	LYS	354	25.958	-18.087	30.773	1.00	26.89	A	C
ATOM	1319	CB	LYS	354	25.502	-17.914	32.220	1.00	28.43	A	C
ATOM	1320	CG	LYS	354	26.421	-18.490	33.275	1.00	36.16	A	C
ATOM	1321	CD	LYS	354	25.828	-18.237	34.655	1.00	39.99	A	C
ATOM	1322	CE	LYS	354	26.719	-18.755	35.767	1.00	43.30	A	C
ATOM	1323	NZ	LYS	354	26.125	-18.473	37.121	1.00	47.70	A	N
ATOM	1324	C	LYS	354	24.836	-17.614	29.867	1.00	27.58	A	C
ATOM	1325	O	LYS	354	24.443	-16.447	29.917	1.00	29.96	A	O
ATOM	1326	N	ILE	355	24.351	-18.501	29.010	1.00	26.16	A	N
ATOM	1327	CA	ILE	355	23.256	-18.160	28.114	1.00	27.82	A	C
ATOM	1328	CB	ILE	355	23.102	-19.218	27.003	1.00	30.40	A	C
ATOM	1329	CG2	ILE	355	21.838	-18.952	26.188	1.00	27.87	A	C
ATOM	1330	CG1	ILE	355	24.361	-19.227	26.132	1.00	28.26	A	C
ATOM	1331	CD1	ILE	355	24.319	-20.202	24.983	1.00	33.40	A	C
ATOM	1332	C	ILE	355	21.964	-18.059	28.918	1.00	26.64	A	C
ATOM	1333	O	ILE	355	21.661	-18.935	29.726	1.00	26.98	A	O
ATOM	1334	N	GLU	356	21.229	-16.969	28.713	1.00	28.34	A	N
ATOM	1335	CA	GLU	356	19.964	-16.728	29.409	1.00	28.25	A	C
ATOM	1336	CB	GLU	356	19.327	-15.427	28.906	1.00	33.34	A	C
ATOM	1337	CG	GLU	356	19.210	-14.314	29.943	1.00	40.78	A	C
ATOM	1338	CD	GLU	356	20.545	-13.711	30.355	1.00	45.18	A	C
ATOM	1339	OE1	GLU	356	20.926	-13.870	31.540	1.00	48.03	A	O
ATOM	1340	OE2	GLU	356	21.192	-13.049	29.510	1.00	46.47	A	O
ATOM	1341	C	GLU	356	18.990	-17.887	29.185	1.00	25.74	A	C
ATOM	1342	O	GLU	356	18.856	-18.388	28.072	1.00	26.15	A	O
ATOM	1343	N	PRO	357	18.321	-18.345	30.249	1.00	25.04	A	N
ATOM	1344	CD	PRO	357	18.306	-17.804	31.627	1.00	26.43	A	C
ATOM	1345	CA	PRO	357	17.370	-19.450	30.103	1.00	22.76	A	C
ATOM	1346	CB	PRO	357	17.018	-19.786	31.559	1.00	22.44	A	C
ATOM	1347	CG	PRO	357	17.052	-18.458	32.232	1.00	25.06	A	C
ATOM	1348	C	PRO	357	16.127	-19.006	29.304	1.00	20.02	A	C
ATOM	1349	O	PRO	357	15.911	-17.813	29.085	1.00	17.63	A	O
ATOM	1350	N	PRO	358	15.312	-19.968	28.847	1.00	18.31	A	N
ATOM	1351	CD	PRO	358	15.486	-21.423	29.016	1.00	20.46	A	C
ATOM	1352	CA	PRO	358	14.102	-19.664	28.080	1.00	17.69	A	C
ATOM	1353	CB	PRO	358	13.612	-21.046	27.649	1.00	20.04	A	C
ATOM	1354	CG	PRO	358	14.102	-21.950	28.754	1.00	22.90	A	C
ATOM	1355	C	PRO	358	13.060	-18.924	28.912	1.00	18.42	A	C
ATOM	1356	O	PRO	358	13.079	-18.967	30.133	1.00	17.80	A	O
ATOM	1357	N	GLY	359	12.192	-18.183	28.239	1.00	18.91	A	N
ATOM	1358	CA	GLY	359	11.159	-17.450	28.940	1.00	18.08	A	C
ATOM	1359	C	GLY	359	10.247	-16.724	27.974	1.00	18.35	A	C
ATOM	1360	O	GLY	359	10.247	-17.009	26.776	1.00	19.77	A	O
ATOM	1361	N	LEU	360	9.469	-15.785	28.492	1.00	15.46	A	N
ATOM	1362	CA	LEU	360	8.550	-15.031	27.655	1.00	15.64	A	C
ATOM	1363	CB	LEU	360	7.177	-14.933	28.319	1.00	14.03	A	C
ATOM	1364	CG	LEU	360	6.509	-16.263	28.660	1.00	15.33	A	C
ATOM	1365	CD1	LEU	360	5.131	-15.974	29.228	1.00	13.50	A	C
ATOM	1366	CD2	LEU	360	6.414	-17.138	27.405	1.00	12.08	A	C
ATOM	1367	C	LEU	360	9.103	-13.634	27.429	1.00	13.66	A	C
ATOM	1368	O	LEU	360	9.603	-13.009	28.348	1.00	18.10	A	O

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ATOM	1369	N	PHE	361	8.960	-13.141	26.210	1.00	12.84	A	N
ATOM	1370	CA	PHE	361	9.441	-11.823	25.858	1.00	12.85	A	C
ATOM	1371	CB	PHE	361	9.627	-11.736	24.346	1.00	10.75	A	C
ATOM	1372	CG	PHE	361	10.205	-10.425	23.879	1.00	15.91	A	C
ATOM	1373	CD1	PHE	361	9.378	-9.424	23.374	1.00	12.52	A	C
ATOM	1374	CD2	PHE	361	11.572	-10.191	23.948	1.00	13.08	A	C
ATOM	1375	CE1	PHE	361	9.904	-8.215	22.949	1.00	14.74	A	C
ATOM	1376	CE2	PHE	361	12.111	-8.978	23.522	1.00	15.47	A	C
ATOM	1377	CZ	PHE	361	11.268	-7.988	23.021	1.00	13.43	A	C
ATOM	1378	C	PHE	361	8.462	-10.747	26.322	1.00	15.29	A	C
ATOM	1379	O	PHE	361	7.252	-10.956	26.335	1.00	16.07	A	O
ATOM	1380	N	ARG	362	9.001	-9.622	26.763	1.00	16.24	A	N
ATOM	1381	CA	ARG	362	8.180	-8.498	27.188	1.00	19.83	A	C
ATOM	1382	CB	ARG	362	8.206	-8.321	28.714	1.00	23.28	A	C
ATOM	1383	CG	ARG	362	7.036	-7.472	29.260	1.00	30.16	A	C
ATOM	1384	CD	ARG	362	7.360	-5.992	29.323	1.00	34.28	A	C
ATOM	1385	NE	ARG	362	6.182	-5.127	29.456	1.00	34.59	A	N
ATOM	1386	CZ	ARG	362	5.755	-4.307	28.496	1.00	37.87	A	C
ATOM	1387	NH1	ARG	362	6.397	-4.256	27.333	1.00	35.26	A	N
ATOM	1388	NH2	ARG	362	4.744	-3.476	28.720	1.00	38.33	A	N
ATOM	1389	C	ARG	362	8.683	-7.241	26.477	1.00	18.59	A	C
ATOM	1390	O	ARG	362	7.890	-6.465	25.952	1.00	18.26	A	O
ATOM	1391	N	GLY	363	10.003	-7.078	26.408	1.00	17.42	A	N
ATOM	1392	CA	GLY	363	10.577	-5.914	25.753	1.00	12.75	A	C
ATOM	1393	C	GLY	363	10.338	-4.666	26.569	1.00	17.14	A	C
ATOM	1394	O	GLY	363	10.054	-4.748	27.764	1.00	17.75	A	O
ATOM	1395	N	ARG	364	10.487	-3.508	25.938	1.00	18.52	A	N
ATOM	1396	CA	ARG	364	10.273	-2.231	26.612	1.00	23.66	A	C
ATOM	1397	CB	ARG	364	11.599	-1.451	26.737	1.00	24.59	A	C
ATOM	1398	CG	ARG	364	12.650	-2.241	27.550	1.00	26.62	A	C
ATOM	1399	CD	ARG	364	13.819	-1.418	28.096	1.00	31.63	A	C
ATOM	1400	NE	ARG	364	14.900	-1.259	27.129	1.00	33.84	A	N
ATOM	1401	CZ	ARG	364	16.071	-1.901	27.165	1.00	33.03	A	C
ATOM	1402	NH1	ARG	364	16.357	-2.769	28.133	1.00	30.10	A	N
ATOM	1403	NH2	ARG	364	16.956	-1.686	26.201	1.00	23.09	A	N
ATOM	1404	C	ARG	364	9.205	-1.477	25.824	1.00	24.70	A	C
ATOM	1405	O	ARG	364	9.052	-1.680	24.624	1.00	23.11	A	O
ATOM	1406	N	GLY	365	8.375	-0.720	26.528	1.00	27.70	A	N
ATOM	1407	CA	GLY	365	7.310	0.009	25.863	1.00	29.69	A	C
ATOM	1408	C	GLY	365	6.208	-0.906	25.350	1.00	30.52	A	C
ATOM	1409	O	GLY	365	6.104	-2.060	25.740	1.00	31.49	A	O
ATOM	1410	N	ASN	366	5.387	-0.384	24.454	1.00	31.36	A	N
ATOM	1411	CA	ASN	366	4.278	-1.134	23.881	1.00	30.53	A	C
ATOM	1412	CB	ASN	366	3.182	-0.132	23.483	1.00	35.95	A	C
ATOM	1413	CG	ASN	366	2.110	-0.737	22.615	1.00	41.78	A	C
ATOM	1414	OD1	ASN	366	1.530	-0.048	21.780	1.00	47.73	A	O
ATOM	1415	ND2	ASN	366	1.842	-2.028	22.793	1.00	44.91	A	N
ATOM	1416	C	ASN	366	4.786	-1.950	22.689	1.00	27.36	A	C
ATOM	1417	O	ASN	366	4.637	-1.547	21.540	1.00	26.65	A	O
ATOM	1418	N	HIS	367	5.384	-3.105	22.981	1.00	22.82	A	N
ATOM	1419	CA	HIS	367	5.964	-3.979	21.957	1.00	20.85	A	C
ATOM	1420	CB	HIS	367	7.153	-4.754	22.548	1.00	18.57	A	C
ATOM	1421	CG	HIS	367	8.111	-5.266	21.520	1.00	17.78	A	C
ATOM	1422	CD2	HIS	367	7.958	-6.185	20.537	1.00	16.58	A	C
ATOM	1423	ND1	HIS	367	9.398	-4.785	21.399	1.00	18.00	A	N
ATOM	1424	CE1	HIS	367	9.995	-5.381	20.380	1.00	18.51	A	C
ATOM	1425	NE2	HIS	367	9.143	-6.235	19.840	1.00	21.28	A	N
ATOM	1426	C	HIS	367	4.967	-4.967	21.343	1.00	18.48	A	C
ATOM	1427	O	HIS	367	4.298	-5.701	22.062	1.00	20.42	A	O
ATOM	1428	N	PRO	368	4.919	-5.046	20.001	1.00	18.58	A	N
ATOM	1429	CD	PRO	368	5.779	-4.269	19.094	1.00	21.41	A	C
ATOM	1430	CA	PRO	368	4.033	-5.930	19.227	1.00	19.61	A	C
ATOM	1431	CB	PRO	368	4.358	-5.566	17.779	1.00	17.64	A	C
ATOM	1432	CG	PRO	368	4.952	-4.214	17.857	1.00	20.68	A	C
ATOM	1433	C	PRO	368	4.326	-7.419	19.427	1.00	20.18	A	C
ATOM	1434	O	PRO	368	3.520	-8.267	19.057	1.00	19.19	A	O
ATOM	1435	N	LYS	369	5.518	-7.735	19.923	1.00	18.80	A	N
ATOM	1436	CA	LYS	369	5.895	-9.122	20.139	1.00	17.46	A	C
ATOM	1437	CB	LYS	369	7.245	-9.398	19.477	1.00	17.87	A	C
ATOM	1438	CG	LYS	369	7.146	-9.455	17.957	1.00	21.69	A	C
ATOM	1439	CD	LYS	369	8.508	-9.371	17.296	1.00	23.08	A	C
ATOM	1440	CE	LYS	369	8.391	-9.418	15.789	1.00	21.41	A	C
ATOM	1441	NZ	LYS	369	7.795	-10.701	15.336	1.00	31.19	A	N
ATOM	1442	C	LYS	369	5.880	-9.595	21.600	1.00	16.22	A	C
ATOM	1443	O	LYS	369	6.292	-10.720	21.894	1.00	15.30	A	O
ATOM	1444	N	MET	370	5.412	-8.751	22.516	1.00	11.07	A	N

ATOM	1445	CA	MET	370	5.356	-9.150	23.922	1.00	12.88	A	C
ATOM	1446	CB	MET	370	4.783	-8.027	24.798	1.00	15.63	A	C
ATOM	1447	CG	MET	370	3.350	-7.635	24.497	1.00	22.47	A	C
ATOM	1448	SD	MET	370	2.631	-6.579	25.788	1.00	33.41	A	S
ATOM	1449	CE	MET	370	2.899	-4.910	25.068	1.00	35.96	A	C
ATOM	1450	C	MET	370	4.493	-10.405	24.055	1.00	14.60	A	C
ATOM	1451	O	MET	370	3.504	-10.571	23.321	1.00	16.39	A	O
ATOM	1452	N	GLY	371	4.893	-11.295	24.959	1.00	13.95	A	N
ATOM	1453	CA	GLY	371	4.167	-12.529	25.170	1.00	10.54	A	C
ATOM	1454	C	GLY	371	4.779	-13.706	24.443	1.00	11.02	A	C
ATOM	1455	O	GLY	371	4.495	-14.850	24.788	1.00	10.01	A	O
ATOM	1456	N	MET	372	5.572	-13.431	23.409	1.00	11.55	A	N
ATOM	1457	CA	MET	372	6.220	-14.486	22.634	1.00	15.96	A	C
ATOM	1458	CB	MET	372	6.888	-13.931	21.375	1.00	18.26	A	C
ATOM	1459	CG	MET	372	5.934	-13.783	20.201	1.00	23.98	A	C
ATOM	1460	SD	MET	372	6.725	-13.162	18.708	1.00	29.70	A	S
ATOM	1461	CE	MET	372	7.020	-14.712	17.758	1.00	33.08	A	C
ATOM	1462	C	MET	372	7.224	-15.282	23.448	1.00	13.45	A	C
ATOM	1463	O	MET	372	7.747	-14.806	24.445	1.00	14.90	A	O
ATOM	1464	N	LEU	373	7.450	-16.516	23.025	1.00	16.42	A	N
ATOM	1465	CA	LEU	373	8.368	-17.426	23.708	1.00	16.77	A	C
ATOM	1466	CB	LEU	373	7.893	-18.870	23.515	1.00	16.76	A	C
ATOM	1467	CG	LEU	373	8.750	-20.002	24.108	1.00	23.25	A	C
ATOM	1468	CD1	LEU	373	8.728	-19.961	25.634	1.00	17.50	A	C
ATOM	1469	CD2	LEU	373	8.237	-21.353	23.615	1.00	22.71	A	C
ATOM	1470	C	LEU	373	9.816	-17.302	23.234	1.00	16.50	A	C
ATOM	1471	O	LEU	373	10.076	-17.285	22.038	1.00	15.14	A	O
ATOM	1472	N	LYS	374	10.731	-17.107	24.181	1.00	17.33	A	N
ATOM	1473	CA	LYS	374	12.165	-17.052	23.888	1.00	19.25	A	C
ATOM	1474	CB	LYS	374	12.904	-16.141	24.875	1.00	18.94	A	C
ATOM	1475	CG	LYS	374	12.598	-14.648	24.730	1.00	24.05	A	C
ATOM	1476	CD	LYS	374	13.402	-13.798	25.715	1.00	24.48	A	C
ATOM	1477	CE	LYS	374	12.843	-13.888	27.114	1.00	29.68	A	C
ATOM	1478	NZ	LYS	374	13.597	-13.036	28.090	1.00	35.33	A	N
ATOM	1479	C	LYS	374	12.573	-18.502	24.137	1.00	20.54	A	C
ATOM	1480	O	LYS	374	12.740	-18.910	25.279	1.00	22.08	A	O
ATOM	1481	N	ARG	375	12.685	-19.291	23.079	1.00	19.90	A	N
ATOM	1482	CA	ARG	375	13.014	-20.698	23.252	1.00	21.03	A	C
ATOM	1483	CB	ARG	375	12.702	-21.491	21.971	1.00	27.62	A	C
ATOM	1484	CG	ARG	375	13.889	-21.858	21.104	1.00	36.61	A	C
ATOM	1485	CD	ARG	375	14.424	-20.681	20.325	1.00	42.48	A	C
ATOM	1486	NE	ARG	375	15.577	-21.069	19.516	1.00	49.01	A	N
ATOM	1487	CZ	ARG	375	16.459	-20.213	19.005	1.00	51.32	A	C
ATOM	1488	NH1	ARG	375	16.328	-18.907	19.213	1.00	51.73	A	N
ATOM	1489	NH2	ARG	375	17.483	-20.668	18.293	1.00	52.35	A	N
ATOM	1490	C	ARG	375	14.422	-20.978	23.767	1.00	18.38	A	C
ATOM	1491	O	ARG	375	15.329	-20.155	23.627	1.00	18.56	A	O
ATOM	1492	N	ARG	376	14.581	-22.144	24.382	1.00	15.68	A	N
ATOM	1493	CA	ARG	376	15.849	-22.574	24.937	1.00	15.62	A	C
ATOM	1494	CB	ARG	376	15.680	-23.915	25.650	1.00	19.29	A	C
ATOM	1495	CG	ARG	376	16.929	-24.388	26.383	1.00	18.60	A	C
ATOM	1496	CD	ARG	376	16.667	-25.692	27.126	1.00	18.72	A	C
ATOM	1497	NE	ARG	376	15.677	-25.547	28.195	1.00	19.97	A	N
ATOM	1498	CZ	ARG	376	15.961	-25.174	29.440	1.00	22.21	A	C
ATOM	1499	NH1	ARG	376	17.210	-24.894	29.795	1.00	20.68	A	N
ATOM	1500	NH2	ARG	376	14.997	-25.105	30.345	1.00	22.63	A	N
ATOM	1501	C	ARG	376	16.120	-22.693	23.863	1.00	17.41	A	C
ATOM	1502	O	ARG	376	16.715	-23.362	22.848	1.00	19.38	A	O
ATOM	1503	N	ILE	377	18.031	-21.986	24.054	1.00	17.16	A	N
ATOM	1504	CA	ILE	377	19.140	-22.046	23.098	1.00	19.33	A	C
ATOM	1505	CB	ILE	377	20.126	-20.876	23.287	1.00	18.84	A	C
ATOM	1506	CG2	ILE	377	21.196	-20.943	22.239	1.00	17.85	A	C
ATOM	1507	CG1	ILE	377	19.402	-19.515	23.195	1.00	22.02	A	C
ATOM	1508	CD1	ILE	377	18.741	-19.254	21.857	1.00	21.21	A	C
ATOM	1509	C	ILE	377	19.881	-23.383	23.307	1.00	19.57	A	C
ATOM	1510	O	ILE	377	20.210	-23.751	24.430	1.00	20.45	A	O
ATOM	1511	N	MET	378	20.136	-24.090	22.215	1.00	20.13	A	N
ATOM	1512	CA	MET	378	20.799	-25.395	22.235	1.00	21.49	A	C
ATOM	1513	CB	MET	378	19.917	-26.406	21.497	1.00	25.63	A	C
ATOM	1514	CG	MET	378	18.478	-26.443	21.959	1.00	30.90	A	C
ATOM	1515	SD	MET	378	18.368	-27.004	23.651	1.00	37.36	A	S
ATOM	1516	CE	MET	378	18.138	-28.752	23.379	1.00	40.25	A	C
ATOM	1517	C	MET	378	22.134	-25.334	21.493	1.00	19.88	A	C
ATOM	1518	O	MET	378	22.325	-24.472	20.627	1.00	18.65	A	O
ATOM	1519	N	PRO	379	23.043	-26.298	21.766	1.00	19.21	A	N
ATOM	1520	CD	PRO	379	22.894	-27.417	22.726	1.00	17.46	A	C

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ATOM	1521	CA	PRO	379	24.355	-26.342	21.105	1.00	18.33	A	C
ATOM	1522	CB	PRO	379	24.911	-27.692	21.546	1.00	19.53	A	C
ATOM	1523	CG	PRO	379	24.325	-27.872	22.929	1.00	16.70	A	C
ATOM	1524	C	PRO	379	24.180	-26.277	19.585	1.00	21.20	A	C
ATOM	1525	O	PRO	379	24.984	-25.645	18.885	1.00	19.45	A	O
ATOM	1526	N	GLU	380	23.093	-26.886	19.097	1.00	19.59	A	N
ATOM	1527	CA	GLU	380	22.744	-26.900	17.666	1.00	21.94	A	C
ATOM	1528	CB	GLU	380	21.507	-27.782	17.416	1.00	22.58	A	C
ATOM	1529	CG	GLU	380	21.780	-29.282	17.401	1.00	26.32	A	C
ATOM	1530	CD	GLU	380	22.180	-29.839	18.758	1.00	29.31	A	C
ATOM	1531	OE1	GLU	380	21.765	-29.270	19.794	1.00	30.96	A	O
ATOM	1532	OE2	GLU	380	22.913	-30.850	18.780	1.00	28.26	A	O
ATOM	1533	C	GLU	380	22.484	-25.507	17.068	1.00	21.86	A	C
ATOM	1534	O	GLU	380	22.505	-25.340	15.850	1.00	24.27	A	O
ATOM	1535	N	ASP	381	22.167	-24.531	17.913	1.00	20.47	A	N
ATOM	1536	CA	ASP	381	21.933	-23.152	17.459	1.00	22.91	A	C
ATOM	1537	CB	ASP	381	20.891	-22.453	18.342	1.00	27.24	A	C
ATOM	1538	CG	ASP	381	19.563	-23.167	18.370	1.00	31.82	A	C
ATOM	1539	OD1	ASP	381	19.006	-23.422	17.278	1.00	34.28	A	O
ATOM	1540	OD2	ASP	381	19.070	-23.449	19.490	1.00	33.05	A	O
ATOM	1541	C	ASP	381	23.207	-22.329	17.595	1.00	21.66	A	C
ATOM	1542	O	ASP	381	23.256	-21.181	17.154	1.00	20.69	A	O
ATOM	1543	N	ILE	382	24.226	-22.922	18.209	1.00	18.43	A	N
ATOM	1544	CA	ILE	382	25.477	-22.228	18.490	1.00	18.48	A	C
ATOM	1545	CB	ILE	382	26.086	-22.717	19.834	1.00	19.32	A	C
ATOM	1546	CG2	ILE	382	27.403	-22.039	20.102	1.00	18.35	A	C
ATOM	1547	CG1	ILE	382	25.110	-22.481	20.989	1.00	15.67	A	C
ATOM	1548	CD1	ILE	382	24.842	-21.057	21.282	1.00	12.98	A	C
ATOM	1549	C	ILE	382	26.579	-22.242	17.466	1.00	18.02	A	C
ATOM	1550	O	ILE	382	26.988	-23.289	16.968	1.00	19.84	A	O
ATOM	1551	N	ILE	383	27.092	-21.054	17.186	1.00	18.67	A	N
ATOM	1552	CA	ILE	383	28.207	-20.914	16.270	1.00	17.46	A	C
ATOM	1553	CB	ILE	383	27.955	-19.827	15.224	1.00	18.60	A	C
ATOM	1554	CG2	ILE	383	29.177	-19.676	14.332	1.00	17.52	A	C
ATOM	1555	CG1	ILE	383	26.706	-20.183	14.416	1.00	20.24	A	C
ATOM	1556	CD1	ILE	383	26.350	-19.192	13.344	1.00	25.76	A	C
ATOM	1557	C	ILE	383	29.366	-20.516	17.161	1.00	16.99	A	C
ATOM	1558	O	ILE	383	29.268	-19.557	17.916	1.00	17.86	A	O
ATOM	1559	N	ILE	384	30.435	-21.300	17.110	1.00	17.85	A	N
ATOM	1560	CA	ILE	384	31.642	-21.069	17.901	1.00	16.88	A	C
ATOM	1561	CB	ILE	384	32.213	-22.412	18.406	1.00	17.01	A	C
ATOM	1562	CG2	ILE	384	33.548	-22.210	19.082	1.00	16.53	A	C
ATOM	1563	CG1	ILE	384	31.216	-23.112	19.324	1.00	16.92	A	C
ATOM	1564	CD1	ILE	384	31.047	-22.447	20.683	1.00	17.16	A	C
ATOM	1565	C	ILE	384	32.712	-20.407	17.019	1.00	17.83	A	C
ATOM	1566	O	ILE	384	32.853	-20.757	15.848	1.00	18.36	A	O
ATOM	1567	N	ASN	385	33.446	-19.449	17.578	1.00	15.70	A	N
ATOM	1568	CA	ASN	385	34.520	-18.767	16.848	1.00	15.26	A	C
ATOM	1569	CB	ASN	385	34.208	-17.277	16.679	1.00	16.51	A	C
ATOM	1570	CG	ASN	385	35.166	-16.575	15.720	1.00	21.06	A	C
ATOM	1571	OD1	ASN	385	35.554	-17.129	14.691	1.00	21.15	A	O
ATOM	1572	ND2	ASN	385	35.519	-15.328	16.041	1.00	20.59	A	N
ATOM	1573	C	ASN	385	35.796	-18.920	17.665	1.00	17.44	A	C
ATOM	1574	O	ASN	385	35.787	-18.710	18.883	1.00	17.04	A	O
ATOM	1575	N	CYS	386	36.874	-19.321	17.002	1.00	17.26	A	N
ATOM	1576	CA	CYS	386	38.174	-19.500	17.647	1.00	23.14	A	C
ATOM	1577	CB	CYS	386	38.169	-20.743	18.542	1.00	25.45	A	C
ATOM	1578	SG	CYS	386	37.846	-22.283	17.670	1.00	31.36	A	S
ATOM	1579	C	CYS	386	39.280	-19.614	16.595	1.00	23.18	A	C
ATOM	1580	O	CYS	386	38.994	-19.703	15.401	1.00	26.21	A	O
ATOM	1581	N	SER	387	40.537	-19.547	17.021	1.00	23.65	A	N
ATOM	1582	CA	SER	387	41.643	-19.653	16.071	1.00	26.19	A	C
ATOM	1583	CB	SER	387	42.925	-19.058	16.647	1.00	24.34	A	C
ATOM	1584	OG	SER	387	43.319	-19.736	17.819	1.00	27.61	A	O
ATOM	1585	C	SER	387	41.855	-21.107	15.678	1.00	28.77	A	C
ATOM	1586	O	SER	387	41.497	-22.009	16.428	1.00	27.87	A	O
ATOM	1587	N	LYS	388	42.410	-21.317	14.486	1.00	34.01	A	N
ATOM	1588	CA	LYS	388	42.664	-22.654	13.948	1.00	37.94	A	C
ATOM	1589	CB	LYS	388	43.152	-22.571	12.499	1.00	41.30	A	C
ATOM	1590	CG	LYS	388	42.142	-22.047	11.488	1.00	46.24	A	C
ATOM	1591	CD	LYS	388	42.648	-22.281	10.066	1.00	50.52	A	C
ATOM	1592	CE	LYS	388	41.668	-21.796	9.004	1.00	53.10	A	C
ATOM	1593	NZ	LYS	388	41.615	-20.307	8.905	1.00	56.94	A	N
ATOM	1594	C	LYS	388	43.659	-23.496	14.736	1.00	38.76	A	C
ATOM	1595	O	LYS	388	43.809	-24.687	14.457	1.00	41.58	A	O
ATOM	1596	N	ASP	389	44.369	-22.881	15.680	1.00	37.89	A	N

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ATOM	1597	CA	ASP	389	45.350	-23.615	16.483	1.00	39.03	A	C
ATOM	1598	CB	ASP	389	46.749	-22.981	16.371	1.00	41.61	A	C
ATOM	1599	CG	ASP	389	46.748	-21.469	16.597	1.00	45.50	A	C
ATOM	1600	OD1	ASP	389	47.819	-20.847	16.408	1.00	47.01	A	O
ATOM	1601	OD2	ASP	389	45.693	-20.895	16.947	1.00	45.40	A	O
ATOM	1602	C	ASP	389	44.958	-23.790	17.948	1.00	37.27	A	C
ATOM	1603	O	ASP	389	45.709	-24.364	18.737	1.00	37.03	A	O
ATOM	1604	N	ALA	390	43.785	-23.284	18.310	1.00	33.88	A	N
ATOM	1605	CA	ALA	390	43.302	-23.411	19.676	1.00	31.41	A	C
ATOM	1606	CB	ALA	390	42.393	-22.250	20.021	1.00	31.25	A	C
ATOM	1607	C	ALA	390	42.544	-24.719	19.836	1.00	30.49	A	C
ATOM	1608	O	ALA	390	42.156	-25.350	18.856	1.00	31.55	A	O
ATOM	1609	N	LYS	391	42.361	-25.132	21.080	1.00	30.48	A	N
ATOM	1610	CA	LYS	391	41.620	-26.344	21.384	1.00	31.90	A	C
ATOM	1611	CB	LYS	391	41.939	-26.789	22.816	1.00	34.73	A	C
ATOM	1612	CG	LYS	391	41.320	-28.106	23.242	1.00	37.71	A	C
ATOM	1613	CD	LYS	391	41.816	-28.485	24.626	1.00	39.10	A	C
ATOM	1614	CE	LYS	391	41.465	-29.922	24.974	1.00	43.95	A	C
ATOM	1615	NZ	LYS	391	39.992	-30.141	25.047	1.00	46.58	A	N
ATOM	1616	C	LYS	391	40.137	-25.978	21.255	1.00	30.46	A	C
ATOM	1617	O	LYS	391	39.642	-25.127	21.989	1.00	26.32	A	O
ATOM	1618	N	VAL	392	39.452	-26.587	20.293	1.00	29.41	A	N
ATOM	1619	CA	VAL	392	38.033	-26.316	20.072	1.00	31.41	A	C
ATOM	1620	CB	VAL	392	37.556	-26.920	18.732	1.00	34.28	A	C
ATOM	1621	CG1	VAL	392	36.073	-26.656	18.538	1.00	33.79	A	C
ATOM	1622	CG2	VAL	392	38.353	-26.323	17.574	1.00	32.65	A	C
ATOM	1623	C	VAL	392	37.170	-26.873	21.209	1.00	30.21	A	C
ATOM	1624	O	VAL	392	37.318	-28.035	21.593	1.00	29.97	A	O
ATOM	1625	N	PRO	393	36.277	-26.040	21.779	1.00	26.27	A	N
ATOM	1626	CD	PRO	393	35.962	-24.647	21.430	1.00	26.60	A	C
ATOM	1627	CA	PRO	393	35.413	-26.499	22.871	1.00	26.34	A	C
ATOM	1628	CB	PRO	393	34.598	-25.248	23.222	1.00	23.04	A	C
ATOM	1629	CG	PRO	393	34.536	-24.520	21.942	1.00	24.70	A	C
ATOM	1630	C	PRO	393	34.510	-27.631	22.408	1.00	26.09	A	C
ATOM	1631	O	PRO	393	34.045	-27.653	21.264	1.00	23.61	A	O
ATOM	1632	N	SER	394	34.311	-28.594	23.292	1.00	27.24	A	N
ATOM	1633	CA	SER	394	33.473	-29.732	22.983	1.00	29.77	A	C
ATOM	1634	CB	SER	394	34.004	-30.984	23.686	1.00	32.07	A	C
ATOM	1635	OG	SER	394	35.302	-31.315	23.211	1.00	40.88	A	O
ATOM	1636	C	SER	394	32.045	-29.466	23.413	1.00	27.31	A	C
ATOM	1637	O	SER	394	31.799	-28.978	24.517	1.00	28.02	A	O
ATOM	1638	N	PRO	395	31.083	-29.742	22.526	1.00	25.90	A	N
ATOM	1639	CD	PRO	395	31.267	-30.226	21.147	1.00	27.39	A	C
ATOM	1640	CA	PRO	395	29.664	-29.533	22.838	1.00	26.67	A	C
ATOM	1641	CB	PRO	395	28.987	-29.746	21.483	1.00	25.89	A	C
ATOM	1642	CG	PRO	395	29.887	-30.727	20.795	1.00	28.87	A	C
ATOM	1643	C	PRO	395	29.234	-30.589	23.857	1.00	26.19	A	C
ATOM	1644	O	PRO	395	29.938	-31.576	24.037	1.00	26.72	A	O
ATOM	1645	N	PRO	396	28.122	-30.366	24.585	1.00	28.22	A	N
ATOM	1646	CD	PRO	396	27.259	-29.172	24.642	1.00	28.60	A	C
ATOM	1647	CA	PRO	396	27.683	-31.370	25.567	1.00	28.89	A	C
ATOM	1648	CB	PRO	396	26.384	-30.775	26.103	1.00	29.42	A	C
ATOM	1649	CG	PRO	396	26.644	-29.290	26.018	1.00	28.83	A	C
ATOM	1650	C	PRO	396	27.448	-32.711	24.856	1.00	31.31	A	C
ATOM	1651	O	PRO	396	27.039	-32.744	23.695	1.00	29.16	A	O
ATOM	1652	N	PRO	397	27.758	-33.829	25.529	1.00	33.16	A	N
ATOM	1653	CD	PRO	397	28.220	-33.897	26.929	1.00	34.26	A	C
ATOM	1654	CA	PRO	397	27.596	-35.177	24.969	1.00	34.48	A	C
ATOM	1655	CB	PRO	397	27.771	-36.069	26.197	1.00	37.57	A	C
ATOM	1656	CG	PRO	397	28.761	-35.300	27.020	1.00	36.26	A	C
ATOM	1657	C	PRO	397	26.262	-35.417	24.256	1.00	33.83	A	C
ATOM	1658	O	PRO	397	25.193	-35.103	24.778	1.00	34.31	A	O
ATOM	1659	N	GLY	398	26.343	-35.948	23.041	1.00	33.20	A	N
ATOM	1660	CA	GLY	398	25.144	-36.208	22.266	1.00	32.24	A	C
ATOM	1661	C	GLY	398	24.652	-35.008	21.477	1.00	32.92	A	C
ATOM	1662	O	GLY	398	23.531	-35.027	20.963	1.00	31.36	A	O
ATOM	1663	N	HIS	399	25.478	-33.962	21.389	1.00	30.39	A	N
ATOM	1664	CA	HIS	399	25.125	-32.753	20.644	1.00	29.43	A	C
ATOM	1665	CB	HIS	399	24.806	-31.597	21.590	1.00	33.09	A	C
ATOM	1666	CG	HIS	399	23.552	-31.781	22.382	1.00	36.22	A	C
ATOM	1667	CD2	HIS	399	22.304	-31.289	22.199	1.00	38.33	A	C
ATOM	1668	ND1	HIS	399	23.512	-32.508	23.551	1.00	40.34	A	N
ATOM	1669	CE1	HIS	399	22.293	-32.451	24.059	1.00	42.11	A	C
ATOM	1670	NE2	HIS	399	21.540	-31.719	23.258	1.00	43.49	A	N
ATOM	1671	C	HIS	399	26.264	-32.314	19.736	1.00	27.84	A	C
ATOM	1672	O	HIS	399	27.384	-32.816	19.836	1.00	27.09	A	O

ATOM	1673	N	LYS	400	25.966	-31.361	18.861	1.00	25.59	A	N
ATOM	1674	CA	LYS	400	26.942	-30.814	17.930	1.00	26.11	A	C
ATOM	1675	CB	LYS	400	26.791	-31.490	16.567	1.00	29.36	A	C
ATOM	1676	CG	LYS	400	27.867	-31.110	15.545	1.00	40.11	A	C
ATOM	1677	CD	LYS	400	27.822	-32.003	14.300	1.00	44.22	A	C
ATOM	1678	CE	LYS	400	28.120	-33.463	14.653	1.00	45.62	A	C
ATOM	1679	NZ	LYS	400	28.105	-34.343	13.451	1.00	48.03	A	N
ATOM	1680	C	LYS	400	26.698	-29.304	17.802	1.00	24.92	A	C
ATOM	1681	O	LYS	400	25.571	-28.846	17.974	1.00	22.07	A	O
ATOM	1682	N	TRP	401	27.760	-28.530	17.584	1.00	22.13	A	N
ATOM	1683	CA	TRP	401	27.608	-27.089	17.418	1.00	21.61	A	C
ATOM	1684	CB	TRP	401	28.958	-26.368	17.457	1.00	19.49	A	C
ATOM	1685	CG	TRP	401	29.780	-26.562	18.684	1.00	17.48	A	C
ATOM	1686	CD2	TRP	401	29.442	-26.186	20.027	1.00	15.42	A	C
ATOM	1687	CE2	TRP	401	30.556	-26.490	20.835	1.00	15.32	A	C
ATOM	1688	CE3	TRP	401	28.307	-25.619	20.625	1.00	17.78	A	C
ATOM	1689	CD1	TRP	401	31.041	-27.073	18.736	1.00	12.91	A	C
ATOM	1690	NE1	TRP	401	31.516	-27.032	20.021	1.00	16.63	A	N
ATOM	1691	CZ2	TRP	401	30.576	-26.246	22.211	1.00	16.60	A	C
ATOM	1692	CZ3	TRP	401	28.324	-25.374	22.001	1.00	15.51	A	C
ATOM	1693	CH2	TRP	401	29.455	-25.688	22.776	1.00	18.17	A	C
ATOM	1694	C	TRP	401	26.998	-26.856	16.038	1.00	23.88	A	C
ATOM	1695	O	TRP	401	27.119	-27.697	15.141	1.00	24.01	A	O
ATOM	1696	N	LYS	402	26.340	-25.718	15.864	1.00	23.16	A	N
ATOM	1697	CA	LYS	402	25.753	-25.388	14.573	1.00	23.50	A	C
ATOM	1698	CB	LYS	402	25.017	-24.051	14.653	1.00	22.91	A	C
ATOM	1699	CG	LYS	402	24.365	-23.598	13.368	1.00	27.13	A	C
ATOM	1700	CD	LYS	402	23.587	-22.312	13.616	1.00	31.32	A	C
ATOM	1701	CE	LYS	402	22.344	-22.219	12.745	1.00	34.98	A	C
ATOM	1702	NZ	LYS	402	22.652	-22.095	11.296	1.00	37.75	A	N
ATOM	1703	C	LYS	402	26.907	-25.270	13.601	1.00	23.85	A	C
ATOM	1704	O	LYS	402	26.875	-25.823	12.505	1.00	25.96	A	O
ATOM	1705	N	GLU	403	27.967	-24.617	14.059	1.00	23.86	A	N
ATOM	1706	CA	GLU	403	29.132	-24.395	13.235	1.00	24.50	A	C
ATOM	1707	CB	GLU	403	28.806	-23.294	12.215	1.00	27.33	A	C
ATOM	1708	CG	GLU	403	29.980	-22.775	11.403	1.00	34.19	A	C
ATOM	1709	CD	GLU	403	29.636	-21.508	10.625	1.00	42.10	A	C
ATOM	1710	OE1	GLU	403	28.765	-20.734	11.083	1.00	47.01	A	O
ATOM	1711	OE2	GLU	403	30.237	-21.274	9.555	1.00	46.11	A	O
ATOM	1712	C	GLU	403	30.350	-23.986	14.054	1.00	24.83	A	C
ATOM	1713	O	GLU	403	30.236	-23.431	15.156	1.00	23.53	A	O
ATOM	1714	N	VAL	404	31.523	-24.320	13.533	1.00	22.09	A	N
ATOM	1715	CA	VAL	404	32.760	-23.921	14.172	1.00	23.10	A	C
ATOM	1716	CB	VAL	404	33.628	-25.111	14.596	1.00	24.37	A	C
ATOM	1717	CG1	VAL	404	34.968	-24.597	15.131	1.00	25.27	A	C
ATOM	1718	CG2	VAL	404	32.910	-25.944	15.662	1.00	20.98	A	C
ATOM	1719	C	VAL	404	33.535	-23.101	13.153	1.00	23.79	A	C
ATOM	1720	O	VAL	404	33.862	-23.603	12.081	1.00	24.92	A	O
ATOM	1721	N	ARG	405	33.709	-21.811	13.413	1.00	23.34	A	N
ATOM	1722	CA	ARG	405	34.498	-21.025	12.479	1.00	27.57	A	C
ATOM	1723	CB	ARG	405	33.667	-20.120	11.564	1.00	29.57	A	C
ATOM	1724	CG	ARG	405	32.845	-19.024	12.160	1.00	30.94	A	C
ATOM	1725	CD	ARG	405	31.850	-18.629	11.060	1.00	30.02	A	C
ATOM	1726	NE	ARG	405	31.198	-17.353	11.283	1.00	30.45	A	N
ATOM	1727	CZ	ARG	405	29.898	-17.136	11.104	1.00	32.63	A	C
ATOM	1728	NH1	ARG	405	29.102	-18.114	10.693	1.00	31.04	A	N
ATOM	1729	NH2	ARG	405	29.384	-15.944	11.367	1.00	25.63	A	N
ATOM	1730	C	ARG	405	35.699	-20.327	13.060	1.00	25.21	A	C
ATOM	1731	O	ARG	405	35.912	-20.326	14.268	1.00	25.12	A	O
ATOM	1732	N	HIS	406	36.526	-19.805	12.166	1.00	26.93	A	N
ATOM	1733	CA	HIS	406	37.764	-19.154	12.542	1.00	28.04	A	C
ATOM	1734	CB	HIS	406	38.924	-20.016	12.042	1.00	31.11	A	C
ATOM	1735	CG	HIS	406	38.767	-21.466	12.367	1.00	31.31	A	C
ATOM	1736	CD2	HIS	406	38.483	-22.531	11.581	1.00	34.90	A	C
ATOM	1737	ND1	HIS	406	38.862	-21.952	13.653	1.00	33.04	A	N
ATOM	1738	CE1	HIS	406	38.643	-23.255	13.646	1.00	34.90	A	C
ATOM	1739	NE2	HIS	406	38.410	-23.631	12.401	1.00	33.20	A	N
ATOM	1740	C	HIS	406	37.815	-17.793	11.889	1.00	28.46	A	O
ATOM	1741	O	HIS	406	38.640	-17.559	11.007	1.00	31.71	A	C
ATOM	1742	N	ASP	407	36.922	-16.903	12.315	1.00	26.26	A	N
ATOM	1743	CA	ASP	407	36.856	-15.569	11.742	1.00	24.83	A	C
ATOM	1744	CB	ASP	407	35.401	-15.145	11.499	1.00	25.71	A	C
ATOM	1745	CG	ASP	407	35.291	-13.874	10.649	1.00	30.42	A	C
ATOM	1746	OD1	ASP	407	36.340	-13.291	10.290	1.00	32.14	A	O
ATOM	1747	OD2	ASP	407	34.156	-13.461	10.329	1.00	31.33	A	O
ATOM	1748	C	ASP	407	37.552	-14.529	12.601	1.00	22.63	A	C

ATOM	1749	O	ASP	407	36.969	-14.008	13.551	1.00	19.14	A	O
ATOM	1750	N	ASN	408	38.787	-14.203	12.233	1.00	22.63	A	N
ATOM	1751	CA	ASN	408	39.549	-13.202	12.969	1.00	23.29	A	C
ATOM	1752	CB	ASN	408	41.059	-13.459	12.873	1.00	25.00	A	C
ATOM	1753	CG	ASN	408	41.591	-13.398	11.452	1.00	27.22	A	C
ATOM	1754	OD1	ASN	408	40.962	-12.853	10.553	1.00	28.10	A	O
ATOM	1755	ND2	ASN	408	42.769	-13.973	11.249	1.00	34.13	A	N
ATOM	1756	C	ASN	408	39.195	-11.759	12.573	1.00	22.27	A	C
ATOM	1757	O	ASN	408	39.889	-10.820	12.942	1.00	24.33	A	O
ATOM	1758	N	LYS	409	38.127	-11.590	11.805	1.00	22.32	A	N
ATOM	1759	CA	LYS	409	37.687	-10.251	11.420	1.00	23.72	A	C
ATOM	1760	CB	LYS	409	37.117	-10.240	9.995	1.00	26.83	A	C
ATOM	1761	CG	LYS	409	38.065	-10.734	8.907	1.00	32.89	A	C
ATOM	1762	CD	LYS	409	39.322	-9.878	8.809	1.00	38.67	A	C
ATOM	1763	CE	LYS	409	40.207	-10.333	7.646	1.00	42.51	A	C
ATOM	1764	NZ	LYS	409	41.371	-9.412	7.449	1.00	44.71	A	N
ATOM	1765	C	LYS	409	36.617	-9.765	12.407	1.00	24.27	A	C
ATOM	1766	O	LYS	409	36.153	-8.628	12.310	1.00	22.10	A	O
ATOM	1767	N	VAL	410	36.215	-10.636	13.339	1.00	23.15	A	N
ATOM	1768	CA	VAL	410	35.201	-10.299	14.339	1.00	21.12	A	C
ATOM	1769	CB	VAL	410	33.881	-11.118	14.146	1.00	23.26	A	C
ATOM	1770	CG1	VAL	410	33.261	-10.804	12.792	1.00	22.15	A	C
ATOM	1771	CG2	VAL	410	34.140	-12.624	14.274	1.00	19.40	A	C
ATOM	1772	C	VAL	410	35.725	-10.482	15.762	1.00	22.08	A	C
ATOM	1773	O	VAL	410	36.725	-11.165	15.989	1.00	20.50	A	O
ATOM	1774	N	THR	411	35.021	-9.907	16.728	1.00	16.43	A	N
ATOM	1775	CA	THR	411	35.462	-9.985	18.114	1.00	20.63	A	C
ATOM	1776	CB	THR	411	35.373	-8.609	18.786	1.00	20.93	A	C
ATOM	1777	OG1	THR	411	33.994	-8.282	19.008	1.00	24.69	A	O
ATOM	1778	CG2	THR	411	35.995	-7.535	17.894	1.00	20.76	A	C
ATOM	1779	C	THR	411	34.673	-10.946	18.992	1.00	17.49	A	C
ATOM	1780	O	THR	411	34.961	-11.077	20.171	1.00	18.55	A	O
ATOM	1781	N	TRP	412	33.679	-11.616	18.430	1.00	20.28	A	N
ATOM	1782	CA	TRP	412	32.863	-12.504	19.242	1.00	17.52	A	C
ATOM	1783	CB	TRP	412	31.412	-12.453	18.776	1.00	15.77	A	C
ATOM	1784	CG	TRP	412	31.198	-12.736	17.306	1.00	11.13	A	C
ATOM	1785	CD2	TRP	412	30.985	-14.017	16.708	1.00	10.01	A	C
ATOM	1786	CE2	TRP	412	30.704	-13.803	15.338	1.00	9.37	A	C
ATOM	1787	CE3	TRP	412	30.988	-15.331	17.201	1.00	11.46	A	C
ATOM	1788	CD1	TRP	412	31.058	-11.815	16.303	1.00	11.62	A	C
ATOM	1789	NE1	TRP	412	30.755	-12.451	15.110	1.00	9.97	A	N
ATOM	1790	CZ2	TRP	412	30.429	-14.852	14.458	1.00	7.99	A	C
ATOM	1791	CZ3	TRP	412	30.713	-16.381	16.319	1.00	9.44	A	C
ATOM	1792	CH2	TRP	412	30.438	-16.132	14.965	1.00	10.34	A	C
ATOM	1793	C	TRP	412	33.363	-13.934	19.376	1.00	16.74	A	C
ATOM	1794	O	TRP	412	34.057	-14.436	18.505	1.00	20.69	A	O
ATOM	1795	N	LEU	413	32.993	-14.581	20.478	1.00	15.51	A	N
ATOM	1796	CA	LEU	413	33.390	-15.962	20.759	1.00	16.41	A	C
ATOM	1797	CB	LEU	413	33.696	-16.131	22.249	1.00	17.51	A	C
ATOM	1798	CG	LEU	413	34.924	-15.450	22.852	1.00	23.35	A	C
ATOM	1799	CD1	LEU	413	34.880	-13.933	22.655	1.00	27.17	A	C
ATOM	1800	CD2	LEU	413	34.967	-15.797	24.331	1.00	25.11	A	C
ATOM	1801	C	LEU	413	32.301	-16.962	20.376	1.00	16.88	A	C
ATOM	1802	O	LEU	413	32.585	-18.044	19.857	1.00	13.79	A	O
ATOM	1803	N	VAL	414	31.055	-16.590	20.651	1.00	15.00	A	N
ATOM	1804	CA	VAL	414	29.909	-17.443	20.379	1.00	14.67	A	C
ATOM	1805	CB	VAL	414	29.383	-18.071	21.698	1.00	14.60	A	C
ATOM	1806	CG1	VAL	414	28.231	-19.010	21.421	1.00	16.17	A	C
ATOM	1807	CG2	VAL	414	30.494	-18.783	22.455	1.00	14.42	A	C
ATOM	1808	C	VAL	414	28.777	-16.588	19.814	1.00	15.26	A	C
ATOM	1809	O	VAL	414	28.603	-15.453	20.235	1.00	16.02	A	O
ATOM	1810	N	SER	415	28.048	-17.102	18.828	1.00	12.49	A	N
ATOM	1811	CA	SER	415	26.907	-16.371	18.306	1.00	14.70	A	C
ATOM	1812	CB	SER	415	27.252	-15.557	17.050	1.00	16.93	A	C
ATOM	1813	OG	SER	415	27.378	-16.364	15.897	1.00	22.59	A	O
ATOM	1814	C	SER	415	25.762	-17.345	18.038	1.00	15.62	A	C
ATOM	1815	O	SER	415	25.977	-18.550	17.931	1.00	15.77	A	O
ATOM	1816	N	TRP	416	24.546	-16.818	18.019	1.00	13.79	A	N
ATOM	1817	CA	TRP	416	23.350	-17.609	17.748	1.00	15.42	A	C
ATOM	1818	CB	TRP	416	22.956	-18.477	18.951	1.00	12.25	A	C
ATOM	1819	CG	TRP	416	22.518	-17.726	20.145	1.00	11.30	A	C
ATOM	1820	CD2	TRP	416	23.350	-17.245	21.205	1.00	14.45	A	C
ATOM	1821	CE2	TRP	416	22.513	-16.569	22.119	1.00	13.74	A	C
ATOM	1822	CE3	TRP	416	24.725	-17.313	21.468	1.00	13.11	A	C
ATOM	1823	CD1	TRP	416	21.250	-17.343	20.449	1.00	12.67	A	C
ATOM	1824	NE1	TRP	416	21.236	-16.644	21.635	1.00	16.56	A	N



ATOM	1825	CZ2	TRP	416	23.004	-15.960	23.283	1.00	17.35	A	C
ATOM	1826	CZ3	TRP	416	25.215	-16.707	22.624	1.00	18.20	A	C
ATOM	1827	CH2	TRP	416	24.355	-16.038	23.516	1.00	18.00	A	C
ATOM	1828	C	TRP	416	22.207	-16.671	17.359	1.00	15.27	A	C
ATOM	1829	O	TRP	416	22.235	-15.483	17.654	1.00	13.72	A	O
ATOM	1830	N	THR	417	21.218	-17.208	16.670	1.00	18.11	A	N
ATOM	1831	CA	THR	417	20.086	-16.407	16.239	1.00	22.34	A	C
ATOM	1832	CB	THR	417	19.664	-16.821	14.810	1.00	22.11	A	C
ATOM	1833	OG1	THR	417	20.704	-16.463	13.896	1.00	21.28	A	O
ATOM	1834	CG2	THR	417	18.367	-16.134	14.393	1.00	25.16	A	C
ATOM	1835	C	THR	417	18.903	-16.540	17.203	1.00	22.36	A	C
ATOM	1836	O	THR	417	18.450	-17.642	17.478	1.00	22.66	A	O
ATOM	1837	N	GLU	418	18.442	-15.416	17.746	1.00	25.40	A	N
ATOM	1838	CA	GLU	418	17.299	-15.415	18.659	1.00	27.23	A	C
ATOM	1839	CB	GLU	418	17.381	-14.256	19.665	1.00	30.55	A	C
ATOM	1840	CG	GLU	418	17.530	-12.866	19.044	1.00	40.77	A	C
ATOM	1841	CD	GLU	418	16.239	-12.054	19.020	1.00	45.53	A	C
ATOM	1842	OE1	GLU	418	15.167	-12.619	18.726	1.00	47.82	A	O
ATOM	1843	OE2	GLU	418	16.296	-10.832	19.296	1.00	52.60	A	O
ATOM	1844	C	GLU	418	16.038	-15.321	17.809	1.00	28.06	A	C
ATOM	1845	O	GLU	418	15.969	-14.513	16.878	1.00	27.01	A	O
ATOM	1846	N	ASN	419	15.048	-16.135	18.165	1.00	28.13	A	N
ATOM	1847	CA	ASN	419	13.770	-16.248	17.459	1.00	32.58	A	C
ATOM	1848	CB	ASN	419	13.070	-17.543	17.894	1.00	34.48	A	C
ATOM	1849	CG	ASN	419	12.718	-17.562	19.396	1.00	39.76	A	C
ATOM	1850	OD1	ASN	419	11.693	-18.126	19.799	1.00	41.19	A	O
ATOM	1851	ND2	ASN	419	13.576	-16.958	20.223	1.00	38.98	A	N
ATOM	1852	C	ASN	419	12.745	-15.099	17.477	1.00	32.32	A	C
ATOM	1853	O	ASN	419	11.845	-15.087	16.644	1.00	37.46	A	O
ATOM	1854	N	ILE	420	12.843	-14.162	18.417	1.00	30.58	A	N
ATOM	1855	CA	ILE	420	11.871	-13.064	18.483	1.00	29.15	A	C
ATOM	1856	CB	ILE	420	11.966	-12.290	19.817	1.00	29.55	A	C
ATOM	1857	CG2	ILE	420	10.880	-11.208	19.882	1.00	29.18	A	C
ATOM	1858	CG1	ILE	420	11.860	-13.256	21.003	1.00	26.86	A	C
ATOM	1859	CD1	ILE	420	10.630	-14.149	20.970	1.00	23.59	A	C
ATOM	1860	C	ILE	420	11.999	-12.064	17.340	1.00	31.40	A	C
ATOM	1861	O	ILE	420	11.059	-11.870	16.572	1.00	31.36	A	O
ATOM	1862	N	GLN	421	13.140	-11.384	17.277	1.00	32.67	A	N
ATOM	1863	CA	GLN	421	13.406	-10.397	16.228	1.00	33.86	A	C
ATOM	1864	CB	GLN	421	14.230	-9.227	16.777	1.00	33.77	A	C
ATOM	1865	CG	GLN	421	13.631	-8.532	17.976	1.00	38.08	A	C
ATOM	1866	CD	GLN	421	12.324	-7.817	17.676	1.00	39.92	A	C
ATOM	1867	OE1	GLN	421	12.065	-7.391	16.546	1.00	40.72	A	O
ATOM	1868	NE2	GLN	421	11.502	-7.660	18.702	1.00	39.68	A	N
ATOM	1869	C	GLN	421	14.183	-11.029	15.083	1.00	33.19	A	C
ATOM	1870	O	GLN	421	14.305	-10.440	14.012	1.00	33.75	A	O
ATOM	1871	N	GLY	422	14.726	-12.220	15.326	1.00	33.36	A	N
ATOM	1872	CA	GLY	422	15.510	-12.902	14.311	1.00	32.66	A	C
ATOM	1873	C	GLY	422	16.914	-12.329	14.191	1.00	32.22	A	C
ATOM	1874	O	GLY	422	17.552	-12.453	13.143	1.00	34.49	A	O
ATOM	1875	N	SER	423	17.397	-11.694	15.256	1.00	30.36	A	N
ATOM	1876	CA	SER	423	18.738	-11.109	15.247	1.00	31.05	A	C
ATOM	1877	CB	SER	423	18.756	-9.768	15.988	1.00	31.57	A	C
ATOM	1878	OG	SER	423	18.436	-9.928	17.358	1.00	40.51	A	O
ATOM	1879	C	SER	423	19.774	-12.047	15.856	1.00	27.21	A	C
ATOM	1880	O	SER	423	19.433	-13.038	16.499	1.00	27.02	A	O
ATOM	1881	N	ILE	424	21.042	-11.727	15.636	1.00	25.58	A	N
ATOM	1882	CA	ILE	424	22.133	-12.532	16.153	1.00	23.61	A	C
ATOM	1883	CB	ILE	424	23.347	-12.534	15.205	1.00	25.77	A	C
ATOM	1884	CG2	ILE	424	24.400	-13.525	15.706	1.00	23.98	A	C
ATOM	1885	CG1	ILE	424	22.927	-12.915	13.790	1.00	27.33	A	C
ATOM	1886	CD1	ILE	424	24.053	-12.768	12.787	1.00	30.04	A	C
ATOM	1887	C	ILE	424	22.593	-11.969	17.476	1.00	20.98	A	C
ATOM	1888	O	ILE	424	22.818	-10.764	17.598	1.00	21.18	A	O
ATOM	1889	N	LYS	425	22.635	-12.837	18.476	1.00	17.21	A	N
ATOM	1890	CA	LYS	425	23.096	-12.500	19.814	1.00	18.35	A	C
ATOM	1891	CB	LYS	425	22.201	-13.154	20.869	1.00	21.54	A	C
ATOM	1892	CG	LYS	425	20.753	-12.617	20.922	1.00	30.89	A	C
ATOM	1893	CD	LYS	425	20.683	-11.108	21.201	1.00	37.07	A	C
ATOM	1894	CE	LYS	425	20.477	-10.292	19.915	1.00	42.71	A	C
ATOM	1895	NZ	LYS	425	20.644	-8.795	20.077	1.00	46.11	A	N
ATOM	1896	C	LYS	425	24.531	-13.023	19.927	1.00	17.60	A	C
ATOM	1897	O	LYS	425	24.898	-14.002	19.265	1.00	11.70	A	O
ATOM	1898	N	TYR	426	25.335	-12.396	20.776	1.00	13.63	A	N
ATOM	1899	CA	TYR	426	26.732	-12.789	20.912	1.00	16.02	A	C
ATOM	1900	CB	TYR	426	27.649	-11.750	20.240	1.00	11.55	A	C

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ATOM	1901	CG	TYR	426	27.338	-11.418	18.800	1.00	10.75	A	C
ATOM	1902	CD1	TYR	426	26.486	-10.362	18.478	1.00	13.21	A	C
ATOM	1903	CE1	TYR	426	26.189	-10.055	17.157	1.00	8.25	A	C
ATOM	1904	CD2	TYR	426	27.892	-12.158	17.758	1.00	9.57	A	C
ATOM	1905	CE2	TYR	426	27.608	-11.861	16.446	1.00	12.49	A	C
ATOM	1906	CZ	TYR	426	26.747	-10.803	16.149	1.00	12.10	A	C
ATOM	1907	OH	TYR	426	26.431	-10.529	15.835	1.00	15.22	A	O
ATOM	1908	C	TYR	426	27.219	-12.887	22.346	1.00	18.40	A	C
ATOM	1909	O	TYR	426	26.602	-12.378	23.275	1.00	19.78	A	O
ATOM	1910	N	ILE	427	28.347	-13.571	22.491	1.00	18.98	A	N
ATOM	1911	CA	ILE	427	29.049	-13.670	23.747	1.00	15.84	A	C
ATOM	1912	CB	ILE	427	29.273	-15.099	24.187	1.00	19.93	A	C
ATOM	1913	CG2	ILE	427	30.410	-15.157	25.192	1.00	13.69	A	C
ATOM	1914	CG1	ILE	427	27.983	-15.664	24.781	1.00	17.01	A	C
ATOM	1915	CD1	ILE	427	28.131	-17.089	25.270	1.00	22.06	A	C
ATOM	1916	C	ILE	427	30.384	-13.028	23.368	1.00	16.62	A	C
ATOM	1917	O	ILE	427	31.101	-13.497	22.477	1.00	15.56	A	O
ATOM	1918	N	MET	428	30.664	-11.895	23.983	1.00	15.72	A	N
ATOM	1919	CA	MET	428	31.888	-11.168	23.703	1.00	17.32	A	C
ATOM	1920	CB	MET	428	31.549	-9.808	23.055	1.00	19.31	A	C
ATOM	1921	CG	MET	428	30.919	-9.915	21.663	1.00	26.28	A	C
ATOM	1922	SD	MET	428	30.407	-8.335	20.905	1.00	35.06	A	S
ATOM	1923	CE	MET	428	30.002	-8.847	19.220	1.00	30.77	A	C
ATOM	1924	C	MET	428	32.662	-10.956	24.997	1.00	15.94	A	C
ATOM	1925	O	MET	428	32.188	-11.289	26.091	1.00	15.05	A	O
ATOM	1926	N	LEU	429	33.852	-10.386	24.864	1.00	14.08	A	N
ATOM	1927	CA	LEU	429	34.689	-10.105	26.014	1.00	14.69	A	C
ATOM	1928	CB	LEU	429	36.118	-9.784	25.574	1.00	12.57	A	C
ATOM	1929	CG	LEU	429	36.821	-10.957	24.878	1.00	17.61	A	C
ATOM	1930	CD1	LEU	429	38.294	-10.653	24.702	1.00	17.11	A	C
ATOM	1931	CD2	LEU	429	36.671	-12.201	25.705	1.00	16.80	A	C
ATOM	1932	C	LEU	429	34.118	-8.985	26.875	1.00	16.26	A	C
ATOM	1933	O	LEU	429	33.309	-8.164	26.428	1.00	15.02	A	O
ATOM	1934	N	ASN	430	34.557	-8.961	28.121	1.00	16.81	A	N
ATOM	1935	CA	ASN	430	34.102	-7.978	29.074	1.00	17.82	A	C
ATOM	1936	CB	ASN	430	34.289	-8.585	30.471	1.00	21.96	A	C
ATOM	1937	CG	ASN	430	35.078	-7.725	31.395	1.00	27.43	A	C
ATOM	1938	OD1	ASN	430	34.582	-7.328	32.449	1.00	29.82	A	O
ATOM	1939	ND2	ASN	430	36.329	-7.453	31.033	1.00	25.45	A	N
ATOM	1940	C	ASN	430	34.735	-6.573	28.841	1.00	19.23	A	C
ATOM	1941	O	ASN	430	35.767	-6.447	28.170	1.00	16.99	A	O
ATOM	1942	N	PRO	431	34.099	-5.502	29.360	1.00	17.06	A	N
ATOM	1943	CD	PRO	431	32.872	-5.518	30.176	1.00	21.47	A	C
ATOM	1944	CA	PRO	431	34.586	-4.126	29.193	1.00	17.59	A	C
ATOM	1945	CB	PRO	431	33.609	-3.308	30.040	1.00	18.19	A	C
ATOM	1946	CG	PRO	431	32.338	-4.116	29.975	1.00	20.70	A	C
ATOM	1947	C	PRO	431	36.033	-3.852	29.579	1.00	18.04	A	C
ATOM	1948	O	PRO	431	36.671	-2.990	28.988	1.00	19.53	A	O
ATOM	1949	N	SER	432	36.566	-4.604	30.535	1.00	20.24	A	N
ATOM	1950	CA	SER	432	37.947	-4.394	30.970	1.00	22.91	A	C
ATOM	1951	CB	SER	432	38.166	-4.998	32.361	1.00	25.27	A	C
ATOM	1952	OG	SER	432	38.322	-6.402	32.282	1.00	30.10	A	O
ATOM	1953	C	SER	432	38.971	-4.963	29.981	1.00	23.84	A	C
ATOM	1954	O	SER	432	40.176	-4.752	30.135	1.00	26.48	A	O
ATOM	1955	N	SER	433	38.488	-5.662	28.959	1.00	20.07	A	N
ATOM	1956	CA	SER	433	39.364	-6.247	27.956	1.00	18.67	A	C
ATOM	1957	CB	SER	433	38.608	-7.265	27.096	1.00	19.63	A	C
ATOM	1958	OG	SER	433	37.667	-6.637	26.239	1.00	21.51	A	O
ATOM	1959	C	SER	433	39.963	-5.182	27.055	1.00	20.01	A	C
ATOM	1960	O	SER	433	39.411	-4.088	26.910	1.00	18.45	A	O
ATOM	1961	N	ARG	434	41.077	-5.538	26.424	1.00	17.69	A	N
ATOM	1962	CA	ARG	434	41.790	-4.664	25.514	1.00	19.51	A	C
ATOM	1963	CB	ARG	434	43.103	-5.319	25.098	1.00	20.72	A	C
ATOM	1964	CG	ARG	434	43.802	-4.615	23.951	1.00	25.14	A	C
ATOM	1965	CD	ARG	434	44.193	-5.606	22.885	1.00	27.18	A	C
ATOM	1966	NE	ARG	434	43.487	-5.339	21.639	1.00	33.15	A	N
ATOM	1967	CZ	ARG	434	43.121	-6.265	20.762	1.00	31.19	A	C
ATOM	1968	NH1	ARG	434	43.382	-7.549	20.982	1.00	37.86	A	N
ATOM	1969	NH2	ARG	434	42.516	-5.899	19.644	1.00	36.46	A	N
ATOM	1970	C	ARG	434	40.958	-4.377	24.271	1.00	22.47	A	C
ATOM	1971	O	ARG	434	40.880	-3.241	23.806	1.00	20.26	A	O
ATOM	1972	N	ILE	435	40.321	-5.411	23.738	1.00	21.06	A	N
ATOM	1973	CA	ILE	435	39.518	-5.248	22.537	1.00	24.04	A	C
ATOM	1974	CB	ILE	435	39.087	-6.635	22.015	1.00	26.71	A	C
ATOM	1975	CG2	ILE	435	37.924	-7.186	22.812	1.00	20.29	A	C
ATOM	1976	CG1	ILE	435	38.843	-6.590	20.516	1.00	28.58	A	C

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ATOM	1977	CD1	ILE	435	38.901	-7.974	19.889	1.00	34.45	A	C
ATOM	1978	C	ILE	435	38.337	-4.261	22.729	1.00	24.92	A	C
ATOM	1979	O	ILE	435	38.026	-3.473	21.827	1.00	25.44	A	O
ATOM	1980	N	LYS	436	37.732	-4.263	23.916	1.00	22.40	A	N
ATOM	1981	CA	LYS	436	36.625	-3.346	24.227	1.00	21.10	A	C
ATOM	1982	CB	LYS	436	35.769	-3.883	25.385	1.00	23.06	A	C
ATOM	1983	CG	LYS	436	34.873	-5.095	25.060	1.00	24.12	A	C
ATOM	1984	CD	LYS	436	33.781	-4.740	24.048	1.00	28.10	A	C
ATOM	1985	CE	LYS	436	32.748	-5.855	23.929	1.00	30.07	A	C
ATOM	1986	NZ	LYS	436	31.827	-5.691	22.750	1.00	30.09	A	N
ATOM	1987	C	LYS	436	37.183	-1.983	24.633	1.00	19.74	A	C
ATOM	1988	O	LYS	436	36.720	-0.952	24.162	1.00	18.24	A	O
ATOM	1989	N	GLY	437	38.186	-2.002	25.506	1.00	19.53	A	N
ATOM	1990	CA	GLY	437	38.804	-0.786	26.001	1.00	18.81	A	C
ATOM	1991	C	GLY	437	39.428	0.087	24.929	1.00	19.91	A	C
ATOM	1992	O	GLY	437	39.226	1.297	24.917	1.00	19.62	A	O
ATOM	1993	N	GLU	438	40.208	-0.520	24.044	1.00	21.38	A	N
ATOM	1994	CA	GLU	438	40.848	0.214	22.961	1.00	25.04	A	C
ATOM	1995	CB	GLU	438	41.723	-0.711	22.104	1.00	25.28	A	C
ATOM	1996	CG	GLU	438	42.521	0.040	21.053	1.00	34.49	A	C
ATOM	1997	CD	GLU	438	43.846	-0.625	20.699	1.00	40.33	A	C
ATOM	1998	OE1	GLU	438	44.154	-0.725	19.486	1.00	41.18	A	O
ATOM	1999	OE2	GLU	438	44.585	-1.023	21.629	1.00	41.85	A	O
ATOM	2000	C	GLU	438	39.804	0.905	22.087	1.00	25.11	A	C
ATOM	2001	O	GLU	438	40.017	2.025	21.625	1.00	24.41	A	O
ATOM	2002	N	LYS	439	38.673	0.240	21.880	1.00	23.58	A	N
ATOM	2003	CA	LYS	439	37.604	0.792	21.063	1.00	25.29	A	C
ATOM	2004	CB	LYS	439	36.592	-0.296	20.724	1.00	28.92	A	C
ATOM	2005	CG	LYS	439	35.721	0.043	19.541	1.00	37.07	A	C
ATOM	2006	CD	LYS	439	35.986	-0.864	18.335	1.00	43.25	A	C
ATOM	2007	CE	LYS	439	37.245	-0.484	17.565	1.00	44.12	A	C
ATOM	2008	NZ	LYS	439	38.491	-0.767	18.330	1.00	48.96	A	N
ATOM	2009	C	LYS	439	36.910	1.968	21.765	1.00	22.53	A	C
ATOM	2010	O	LYS	439	36.496	2.924	21.119	1.00	21.61	A	O
ATOM	2011	N	ASP	440	36.807	1.889	23.087	1.00	19.79	A	N
ATOM	2012	CA	ASP	440	36.191	2.934	23.894	1.00	18.32	A	C
ATOM	2013	CB	ASP	440	36.003	2.436	25.330	1.00	22.26	A	C
ATOM	2014	CG	ASP	440	34.733	2.970	25.977	1.00	28.50	A	C
ATOM	2015	OD1	ASP	440	33.725	3.151	25.256	1.00	32.68	A	O
ATOM	2016	OD2	ASP	440	34.734	3.195	27.208	1.00	27.29	A	O
ATOM	2017	C	ASP	440	37.088	4.169	23.889	1.00	17.54	A	C
ATOM	2018	O	ASP	440	36.612	5.295	23.728	1.00	16.35	A	O
ATOM	2019	N	TRP	441	38.388	3.934	24.048	1.00	16.73	A	N
ATOM	2020	CA	TRP	441	39.410	4.985	24.059	1.00	16.31	A	C
ATOM	2021	CB	TRP	441	40.777	4.350	24.304	1.00	18.03	A	C
ATOM	2022	CG	TRP	441	41.951	5.284	24.349	1.00	23.98	A	C
ATOM	2023	CD2	TRP	441	43.328	4.907	24.401	1.00	25.31	A	C
ATOM	2024	CE2	TRP	441	44.088	6.099	24.425	1.00	27.75	A	C
ATOM	2025	CE3	TRP	441	43.998	3.675	24.432	1.00	26.95	A	C
ATOM	2026	CD1	TRP	441	41.931	6.657	24.347	1.00	25.93	A	C
ATOM	2027	NE1	TRP	441	43.207	7.148	24.389	1.00	26.05	A	N
ATOM	2028	CZ2	TRP	441	45.491	6.096	24.479	1.00	29.39	A	C
ATOM	2029	CZ3	TRP	441	45.394	3.670	24.484	1.00	30.16	A	C
ATOM	2030	CH2	TRP	441	46.126	4.876	24.508	1.00	28.11	A	C
ATOM	2031	C	TRP	441	39.398	5.721	22.719	1.00	18.88	A	C
ATOM	2032	O	TRP	441	39.542	6.944	22.677	1.00	18.59	A	O
ATOM	2033	N	GLN	442	39.215	4.964	21.638	1.00	18.36	A	N
ATOM	2034	CA	GLN	442	39.160	5.515	20.294	1.00	22.31	A	C
ATOM	2035	CB	GLN	442	39.250	4.398	19.248	1.00	24.89	A	C
ATOM	2036	CG	GLN	442	40.696	4.029	18.917	1.00	30.94	A	C
ATOM	2037	CD	GLN	442	40.855	2.705	18.181	1.00	34.87	A	C
ATOM	2038	OE1	GLN	442	41.936	2.116	18.202	1.00	38.97	A	O
ATOM	2039	NE2	GLN	442	39.789	2.233	17.533	1.00	32.63	A	N
ATOM	2040	C	GLN	442	37.899	6.349	20.099	1.00	20.32	A	C
ATOM	2041	O	GLN	442	37.934	7.374	19.439	1.00	16.26	A	O
ATOM	2042	N	LYS	443	36.799	5.914	20.709	1.00	20.78	A	N
ATOM	2043	CA	LYS	443	35.528	6.631	20.633	1.00	20.82	A	C
ATOM	2044	CB	LYS	443	34.453	5.868	21.435	1.00	23.99	A	C
ATOM	2045	CG	LYS	443	33.073	6.528	21.482	1.00	25.08	A	C
ATOM	2046	CD	LYS	443	32.098	5.747	22.372	1.00	24.25	A	C
ATOM	2047	CE	LYS	443	32.453	5.905	23.843	1.00	21.81	A	C
ATOM	2048	NZ	LYS	443	31.598	5.141	24.799	1.00	17.33	A	N
ATOM	2049	C	LYS	443	35.710	8.051	21.204	1.00	19.50	A	C
ATOM	2050	O	LYS	443	35.265	9.032	20.603	1.00	15.80	A	O
ATOM	2051	N	TYR	444	36.385	8.151	22.350	1.00	16.55	A	N
ATOM	2052	CA	TYR	444	36.609	9.444	22.985	1.00	16.07	A	C

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ATOM	2053	CB	TYR	444	37.018	9.271	24.450	1.00	16.93	A	C
ATOM	2054	CG	TYR	444	35.878	8.752	25.281	1.00	13.70	A	C
ATOM	2055	CD1	TYR	444	34.727	9.509	25.437	1.00	18.13	A	C
ATOM	2056	CE1	TYR	444	33.621	9.019	26.104	1.00	17.03	A	C
ATOM	2057	CD2	TYR	444	35.903	7.474	25.833	1.00	15.50	A	C
ATOM	2058	CE2	TYR	444	34.790	6.959	26.516	1.00	18.46	A	C
ATOM	2059	CZ	TYR	444	33.652	7.747	26.639	1.00	21.90	A	C
ATOM	2060	OH	TYR	444	32.532	7.284	27.273	1.00	25.27	A	O
ATOM	2061	C	TYR	444	37.603	10.305	22.220	1.00	18.40	A	C
ATOM	2062	O	TYR	444	37.422	11.518	22.126	1.00	17.12	A	O
ATOM	2063	N	GLU	445	38.626	9.673	21.644	1.00	17.28	A	N
ATOM	2064	CA	GLU	445	39.624	10.383	20.847	1.00	20.75	A	C
ATOM	2065	CB	GLU	445	40.755	9.445	20.402	1.00	23.29	A	C
ATOM	2066	CG	GLU	445	41.742	9.081	21.502	1.00	27.03	A	C
ATOM	2067	CD	GLU	445	42.401	10.301	22.129	1.00	36.24	A	C
ATOM	2068	OE1	GLU	445	42.117	10.585	23.320	1.00	36.02	A	O
ATOM	2069	OE2	GLU	445	43.203	10.975	21.433	1.00	35.83	A	O
ATOM	2070	C	GLU	445	38.941	10.973	19.616	1.00	22.05	A	C
ATOM	2071	O	GLU	445	39.288	12.067	19.167	1.00	23.16	A	O
ATOM	2072	N	THR	446	37.965	10.252	19.072	1.00	21.79	A	N
ATOM	2073	CA	THR	446	37.235	10.744	17.911	1.00	23.32	A	C
ATOM	2074	CB	THR	446	36.319	9.668	17.317	1.00	23.58	A	C
ATOM	2075	OG1	THR	446	37.131	8.662	16.705	1.00	24.76	A	O
ATOM	2076	CG2	THR	446	35.383	10.264	16.260	1.00	23.40	A	C
ATOM	2077	C	THR	446	36.424	11.978	18.311	1.00	25.34	A	C
ATOM	2078	O	THR	446	36.395	12.975	17.582	1.00	27.42	A	O
ATOM	2079	N	ALA	447	35.804	11.920	19.484	1.00	22.22	A	N
ATOM	2080	CA	ALA	447	35.019	13.040	19.988	1.00	24.59	A	C
ATOM	2081	CB	ALA	447	34.313	12.658	21.283	1.00	23.83	A	C
ATOM	2082	C	ALA	447	35.901	14.268	20.215	1.00	24.17	A	C
ATOM	2083	O	ALA	447	35.459	15.397	20.005	1.00	20.17	A	O
ATOM	2084	N	ARG	448	37.138	14.045	20.655	1.00	24.04	A	N
ATOM	2085	CA	ARG	448	38.069	15.143	20.899	1.00	27.16	A	C
ATOM	2086	CB	ARG	448	39.330	14.662	21.610	1.00	27.62	A	C
ATOM	2087	CG	ARG	448	39.087	14.179	23.020	1.00	33.08	A	C
ATOM	2088	CD	ARG	448	40.361	13.694	23.688	1.00	32.99	A	C
ATOM	2089	NE	ARG	448	41.220	14.780	24.147	1.00	33.50	A	N
ATOM	2090	CZ	ARG	448	42.523	14.651	24.380	1.00	33.84	A	C
ATOM	2091	NH1	ARG	448	43.118	13.483	24.188	1.00	31.07	A	N
ATOM	2092	NH2	ARG	448	43.224	15.677	24.845	1.00	33.90	A	N
ATOM	2093	C	ARG	448	38.449	15.827	19.598	1.00	28.49	A	C
ATOM	2094	O	ARG	448	38.539	17.043	19.550	1.00	31.50	A	O
ATOM	2095	N	ARG	449	38.688	15.046	18.548	1.00	30.33	A	N
ATOM	2096	CA	ARG	449	39.037	15.618	17.258	1.00	33.22	A	C
ATOM	2097	CB	ARG	449	39.379	14.528	16.243	1.00	34.19	A	C
ATOM	2098	CG	ARG	449	40.591	13.698	16.637	1.00	39.38	A	C
ATOM	2099	CD	ARG	449	41.082	12.810	15.502	1.00	44.95	A	C
ATOM	2100	NE	ARG	449	40.112	11.792	15.104	1.00	47.73	A	N
ATOM	2101	CZ	ARG	449	39.532	11.740	13.906	1.00	51.60	A	C
ATOM	2102	NH1	ARG	449	39.817	12.653	12.981	1.00	49.76	A	N
ATOM	2103	NH2	ARG	449	38.678	10.761	13.626	1.00	51.00	A	N
ATOM	2104	C	ARG	449	37.874	16.477	16.762	1.00	35.57	A	C
ATOM	2105	O	ARG	449	38.094	17.547	16.202	1.00	37.55	A	O
ATOM	2106	N	LEU	450	36.643	16.028	17.010	1.00	35.79	A	N
ATOM	2107	CA	LEU	450	35.461	16.784	16.608	1.00	36.84	A	C
ATOM	2108	CB	LEU	450	34.172	16.034	16.971	1.00	35.28	A	C
ATOM	2109	CG	LEU	450	32.877	16.853	16.882	1.00	34.50	A	C
ATOM	2110	CD1	LEU	450	32.675	17.357	15.473	1.00	33.81	A	C
ATOM	2111	CD2	LEU	450	31.677	16.035	17.327	1.00	36.55	A	C
ATOM	2112	C	LEU	450	35.465	18.156	17.282	1.00	38.88	A	C
ATOM	2113	O	LEU	450	35.033	19.141	16.690	1.00	37.71	A	O
ATOM	2114	N	LYS	451	35.978	18.208	18.510	1.00	41.08	A	N
ATOM	2115	CA	LYS	451	36.047	19.444	19.280	1.00	44.71	A	C
ATOM	2116	CB	LYS	451	36.717	19.191	20.633	1.00	44.71	A	C
ATOM	2117	CG	LYS	451	36.779	20.407	21.536	1.00	44.80	A	C
ATOM	2118	CD	LYS	451	37.515	20.126	22.836	1.00	46.53	A	C
ATOM	2119	CE	LYS	451	39.020	20.019	22.635	1.00	49.00	A	C
ATOM	2120	NZ	LYS	451	39.440	18.796	21.884	1.00	51.15	A	N
ATOM	2121	C	LYS	451	36.775	20.565	18.551	1.00	46.07	A	C
ATOM	2122	O	LYS	451	36.334	21.709	18.581	1.00	48.93	A	O
ATOM	2123	N	LYS	452	37.860	20.229	17.861	1.00	48.02	A	N
ATOM	2124	CA	LYS	452	38.642	21.230	17.146	1.00	49.19	A	C
ATOM	2125	CB	LYS	452	40.105	20.781	17.033	1.00	53.20	A	C
ATOM	2126	CG	LYS	452	40.315	19.497	16.242	1.00	58.60	A	C
ATOM	2127	CD	LYS	452	41.747	18.979	16.358	1.00	61.69	A	C
ATOM	2128	CE	LYS	452	41.943	17.716	15.516	1.00	63.29	A	C

ATOM	2129	NZ	LYS	452	43.334	17.183	15.587	1.00	61.67	A	N
ATOM	2130	C	LYS	452	38.091	21.647	15.777	1.00	48.77	A	C
ATOM	2131	O	LYS	452	38.719	22.439	15.068	1.00	49.51	A	O
ATOM	2132	N	CYS	453	36.924	21.135	15.339	1.00	46.18	A	N
ATOM	2133	CA	CYS	453	36.342	21.520	14.115	1.00	45.63	A	C
ATOM	2134	CB	CYS	453	36.727	20.520	13.016	1.00	48.79	A	C
ATOM	2135	SG	CYS	453	35.808	18.965	13.020	1.00	54.97	A	S
ATOM	2136	C	CYS	453	34.827	21.691	14.166	1.00	42.76	A	C
ATOM	2137	O	CYS	453	34.185	21.889	13.136	1.00	39.99	A	O
ATOM	2138	N	VAL	454	34.266	21.679	15.372	1.00	40.81	A	N
ATOM	2139	CA	VAL	454	32.826	21.813	15.535	1.00	41.05	A	C
ATOM	2140	CB	VAL	454	32.376	21.423	16.964	1.00	41.45	A	C
ATOM	2141	CG1	VAL	454	32.805	22.472	17.984	1.00	40.98	A	C
ATOM	2142	CG2	VAL	454	30.878	21.194	16.993	1.00	42.45	A	C
ATOM	2143	C	VAL	454	32.283	23.193	15.148	1.00	42.30	A	C
ATOM	2144	O	VAL	454	31.202	23.295	14.567	1.00	42.16	A	O
ATOM	2145	N	ASP	455	33.042	24.248	15.434	1.00	42.66	A	N
ATOM	2146	CA	ASP	455	32.606	25.600	15.087	1.00	44.92	A	C
ATOM	2147	CB	ASP	455	33.515	26.646	15.739	1.00	49.96	A	C
ATOM	2148	CG	ASP	455	32.827	27.996	15.912	1.00	57.90	A	C
ATOM	2149	OD1	ASP	455	31.573	28.038	15.966	1.00	60.04	A	O
ATOM	2150	OD2	ASP	455	33.544	29.019	16.006	1.00	60.53	A	O
ATOM	2151	C	ASP	455	32.590	25.762	13.561	1.00	43.32	A	C
ATOM	2152	O	ASP	455	31.739	26.464	13.007	1.00	42.69	A	O
ATOM	2153	N	LYS	456	33.535	25.099	12.893	1.00	40.38	A	N
ATOM	2154	CA	LYS	456	33.625	25.120	11.438	1.00	38.85	A	C
ATOM	2155	CB	LYS	456	34.908	24.406	10.986	1.00	41.59	A	C
ATOM	2156	CG	LYS	456	34.913	23.864	9.551	1.00	43.48	A	C
ATOM	2157	CD	LYS	456	36.249	23.183	9.251	1.00	46.85	A	C
ATOM	2158	CE	LYS	456	36.158	22.166	8.110	1.00	50.74	A	C
ATOM	2159	NZ	LYS	456	35.812	22.769	6.794	1.00	52.70	A	N
ATOM	2160	C	LYS	456	32.380	24.424	10.881	1.00	37.47	A	C
ATOM	2161	O	LYS	456	31.787	24.883	9.910	1.00	36.87	A	O
ATOM	2162	N	ILE	457	31.970	23.337	11.532	1.00	35.69	A	N
ATOM	2163	CA	ILE	457	30.787	22.593	11.122	1.00	33.15	A	C
ATOM	2164	CB	ILE	457	30.716	21.224	11.827	1.00	34.62	A	C
ATOM	2165	CG2	ILE	457	29.391	20.521	11.500	1.00	31.56	A	C
ATOM	2166	CG1	ILE	457	31.911	20.358	11.398	1.00	36.09	A	C
ATOM	2167	CD1	ILE	457	32.060	19.068	12.178	1.00	35.00	A	C
ATOM	2168	C	ILE	457	29.523	23.396	11.424	1.00	32.51	A	C
ATOM	2169	O	ILE	457	28.590	23.412	10.625	1.00	30.74	A	O
ATOM	2170	N	ARG	458	29.496	24.065	12.574	1.00	32.20	A	N
ATOM	2171	CA	ARG	458	28.340	24.872	12.947	1.00	34.63	A	C
ATOM	2172	CB	ARG	458	28.469	25.397	14.375	1.00	34.17	A	C
ATOM	2173	CG	ARG	458	28.302	24.304	15.407	1.00	39.61	A	C
ATOM	2174	CD	ARG	458	28.439	24.810	16.830	1.00	38.77	A	C
ATOM	2175	NE	ARG	458	28.142	23.734	17.766	1.00	40.77	A	N
ATOM	2176	CZ	ARG	458	28.764	23.551	18.924	1.00	41.50	A	C
ATOM	2177	NH1	ARG	458	29.726	24.380	19.305	1.00	43.61	A	N
ATOM	2178	NH2	ARG	458	28.435	22.525	19.693	1.00	42.36	A	N
ATOM	2179	C	ARG	458	28.127	26.016	11.969	1.00	34.87	A	C
ATOM	2180	O	ARG	458	27.012	26.232	11.500	1.00	36.50	A	O
ATOM	2181	N	ASN	459	29.196	26.731	11.635	1.00	36.87	A	N
ATOM	2182	CA	ASN	459	29.085	27.829	10.685	1.00	38.39	A	C
ATOM	2183	CB	ASN	459	30.435	28.522	10.488	1.00	41.30	A	C
ATOM	2184	CG	ASN	459	30.878	29.306	11.713	1.00	43.12	A	C
ATOM	2185	OD1	ASN	459	32.073	29.472	11.955	1.00	44.70	A	O
ATOM	2186	ND2	ASN	459	29.914	29.792	12.491	1.00	44.08	A	N
ATOM	2187	C	ASN	459	28.566	27.324	9.341	1.00	40.16	A	C
ATOM	2188	O	ASN	459	27.725	27.969	8.720	1.00	43.22	A	O
ATOM	2189	N	GLN	460	29.020	26.143	8.923	1.00	39.24	A	N
ATOM	2190	CA	GLN	460	28.594	25.580	7.649	1.00	39.32	A	C
ATOM	2191	CB	GLN	460	29.461	24.386	7.253	1.00	41.92	A	C
ATOM	2192	CG	GLN	460	29.178	23.875	5.837	1.00	46.90	A	C
ATOM	2193	CD	GLN	460	30.035	22.677	5.439	1.00	51.69	A	C
ATOM	2194	OE1	GLN	460	29.705	21.951	4.494	1.00	54.85	A	O
ATOM	2195	NE2	GLN	460	31.142	22.470	6.149	1.00	50.76	A	N
ATOM	2196	C	GLN	460	27.119	25.191	7.584	1.00	39.59	A	C
ATOM	2197	O	GLN	460	26.432	25.549	6.627	1.00	37.87	A	O
ATOM	2198	N	TYR	461	26.620	24.463	8.579	1.00	39.81	A	N
ATOM	2199	CA	TYR	461	25.218	24.071	8.522	1.00	40.15	A	C
ATOM	2200	CB	TYR	461	24.894	22.866	9.429	1.00	38.02	A	C
ATOM	2201	CG	TYR	461	24.891	23.082	10.930	1.00	37.32	A	C
ATOM	2202	CD1	TYR	461	23.983	23.953	11.535	1.00	37.83	A	C
ATOM	2203	CE1	TYR	461	23.914	24.081	12.922	1.00	36.14	A	C
ATOM	2204	CD2	TYR	461	25.737	22.343	11.756	1.00	37.82	A	C

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ATOM	2205	CE2	TYR	461	25.674	22.462	13.149	1.00	37.20	A	C
ATOM	2206	CZ	TYR	461	24.758	23.334	13.719	1.00	36.97	A	C
ATOM	2207	OH	TYR	461	24.687	23.460	15.085	1.00	37.69	A	O
ATOM	2208	C	TYR	461	24.274	25.251	8.721	1.00	41.12	A	C
ATOM	2209	O	TYR	461	23.149	25.233	8.229	1.00	40.31	A	O
ATOM	2210	N	ARG	462	24.748	26.289	9.411	1.00	43.28	A	N
ATOM	2211	CA	ARG	462	23.943	27.491	9.614	1.00	45.88	A	C
ATOM	2212	CB	ARG	462	24.636	28.479	10.561	1.00	48.49	A	C
ATOM	2213	CG	ARG	462	24.561	28.085	12.028	1.00	53.63	A	C
ATOM	2214	CD	ARG	462	24.992	29.222	12.941	1.00	58.45	A	C
ATOM	2215	NE	ARG	462	24.147	30.405	12.771	1.00	63.86	A	N
ATOM	2216	CZ	ARG	462	24.188	31.483	13.552	1.00	66.65	A	C
ATOM	2217	NH1	ARG	462	23.378	32.508	13.311	1.00	65.65	A	N
ATOM	2218	NH2	ARG	462	25.033	31.538	14.578	1.00	68.00	A	N
ATOM	2219	C	ARG	462	23.721	28.140	8.248	1.00	45.25	A	C
ATOM	2220	O	ARG	462	22.620	28.586	7.933	1.00	44.80	A	O
ATOM	2221	N	GLU	463	24.770	28.151	7.430	1.00	44.50	A	N
ATOM	2222	CA	GLU	463	24.694	28.713	6.088	1.00	46.39	A	C
ATOM	2223	CB	GLU	463	26.096	28.830	5.482	1.00	50.05	A	C
ATOM	2224	CG	GLU	463	27.054	29.690	6.300	1.00	57.28	A	C
ATOM	2225	CD	GLU	463	28.503	29.572	5.845	1.00	61.50	A	C
ATOM	2226	OE1	GLU	463	29.200	28.628	6.286	1.00	63.29	A	O
ATOM	2227	OE2	GLU	463	28.949	30.431	5.055	1.00	64.80	A	O
ATOM	2228	C	GLU	463	23.823	27.810	5.212	1.00	44.95	A	C
ATOM	2229	O	GLU	463	23.086	28.294	4.353	1.00	43.59	A	O
ATOM	2230	N	ASP	464	23.888	26.501	5.459	1.00	41.97	A	N
ATOM	2231	CA	ASP	464	23.106	25.533	4.691	1.00	39.68	A	C
ATOM	2232	CB	ASP	464	23.560	24.095	4.986	1.00	42.55	A	C
ATOM	2233	CG	ASP	464	24.938	23.765	4.386	1.00	45.52	A	C
ATOM	2234	OD1	ASP	464	25.536	24.618	3.690	1.00	47.16	A	O
ATOM	2235	OD2	ASP	464	25.422	22.636	4.602	1.00	46.92	A	O
ATOM	2236	C	ASP	464	21.591	25.681	4.875	1.00	37.48	A	C
ATOM	2237	O	ASP	464	20.817	25.182	4.063	1.00	35.58	A	O
ATOM	2238	N	TRP	465	21.167	26.374	5.931	1.00	35.64	A	N
ATOM	2239	CA	TRP	465	19.742	26.605	6.159	1.00	36.73	A	C
ATOM	2240	CB	TRP	465	19.508	27.291	7.508	1.00	36.57	A	C
ATOM	2241	CG	TRP	465	19.842	26.457	8.702	1.00	35.64	A	C
ATOM	2242	CD2	TRP	465	20.141	26.935	10.017	1.00	34.67	A	C
ATOM	2243	CE2	TRP	465	20.393	25.805	10.825	1.00	33.89	A	C
ATOM	2244	CE3	TRP	465	20.219	28.210	10.593	1.00	35.60	A	C
ATOM	2245	CD1	TRP	465	19.921	25.092	8.763	1.00	34.85	A	C
ATOM	2246	NE1	TRP	465	20.252	24.694	10.035	1.00	32.15	A	N
ATOM	2247	CZ2	TRP	465	20.717	25.912	12.180	1.00	34.24	A	C
ATOM	2248	CZ3	TRP	465	20.542	28.316	11.939	1.00	34.71	A	C
ATOM	2249	CH2	TRP	465	20.787	27.170	12.719	1.00	34.05	A	C
ATOM	2250	C	TRP	465	19.161	27.495	5.051	1.00	38.59	A	C
ATOM	2251	O	TRP	465	17.941	27.567	4.885	1.00	35.23	A	O
ATOM	2252	N	LYS	466	20.050	28.155	4.302	1.00	41.90	A	N
ATOM	2253	CA	LYS	466	19.683	29.061	3.208	1.00	46.88	A	C
ATOM	2254	CB	LYS	466	20.528	30.341	3.263	1.00	48.78	A	C
ATOM	2255	CG	LYS	466	20.463	31.148	4.541	1.00	52.39	A	C
ATOM	2256	CD	LYS	466	21.506	32.267	4.486	1.00	55.50	A	C
ATOM	2257	CE	LYS	466	21.527	33.101	5.757	1.00	57.97	A	C
ATOM	2258	NZ	LYS	466	20.219	33.781	6.002	1.00	60.20	A	N
ATOM	2259	C	LYS	466	19.863	28.486	1.803	1.00	48.20	A	C
ATOM	2260	O	LYS	466	19.436	29.112	0.833	1.00	48.68	A	O
ATOM	2261	N	SER	467	20.516	27.331	1.680	1.00	50.25	A	N
ATOM	2262	CA	SER	467	20.768	26.733	0.364	1.00	52.86	A	C
ATOM	2263	CB	SER	467	21.435	25.367	0.506	1.00	52.57	A	C
ATOM	2264	OG	SER	467	20.540	24.433	1.069	1.00	55.55	A	O
ATOM	2265	C	SER	467	19.545	26.616	-0.551	1.00	54.13	A	C
ATOM	2266	O	SER	467	18.404	26.584	-0.089	1.00	52.58	A	O
ATOM	2267	N	LYS	468	19.804	26.573	-1.856	1.00	56.45	A	N
ATOM	2268	CA	LYS	468	18.752	26.463	-2.865	1.00	58.95	A	C
ATOM	2269	CB	LYS	468	19.329	26.698	-4.265	1.00	60.87	A	C
ATOM	2270	CG	LYS	468	19.475	28.161	-4.668	1.00	65.25	A	C
ATOM	2271	CD	LYS	468	20.234	28.312	-5.995	1.00	67.59	A	C
ATOM	2272	CE	LYS	468	19.626	27.471	-7.121	1.00	69.06	A	C
ATOM	2273	NZ	LYS	468	18.217	27.845	-7.444	1.00	69.95	A	N
ATOM	2274	C	LYS	468	18.051	25.112	-2.846	1.00	58.74	A	C
ATOM	2275	O	LYS	468	16.851	25.029	-3.100	1.00	60.13	A	O
ATOM	2276	N	GLU	469	18.811	24.061	-2.551	1.00	57.78	A	N
ATOM	2277	CA	GLU	469	18.290	22.700	-2.523	1.00	57.07	A	C
ATOM	2278	CB	GLU	469	19.409	21.725	-2.882	1.00	59.12	A	C
ATOM	2279	CG	GLU	469	18.925	20.389	-3.421	1.00	64.55	A	C
ATOM	2280	CD	GLU	469	20.038	19.569	-4.060	1.00	66.76	A	C

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ATOM	2281	OE1	GLU	469	21.204	20.030	-4.067	1.00	67.19	A	O
ATOM	2282	OE2	GLU	469	19.739	18.461	-4.563	1.00	67.93	A	O
ATOM	2283	C	GLU	469	17.653	22.320	-1.186	1.00	54.65	A	C
ATOM	2284	O	GLU	469	18.223	22.562	-0.123	1.00	53.61	A	C
ATOM	2285	N	MET	470	16.475	21.707	-1.257	1.00	53.20	A	N
ATOM	2286	CA	MET	470	15.733	21.291	-0.070	1.00	52.28	A	C
ATOM	2287	CB	MET	470	14.362	20.735	-0.465	1.00	54.79	A	C
ATOM	2288	CG	MET	470	13.465	20.386	0.723	1.00	58.74	A	C
ATOM	2289	SD	MET	470	12.200	21.628	1.093	1.00	64.26	A	S
ATOM	2290	CE	MET	470	13.205	23.031	1.611	1.00	62.53	A	C
ATOM	2291	C	MET	470	16.479	20.256	0.766	1.00	50.40	A	C
ATOM	2292	O	MET	470	16.562	20.384	1.987	1.00	49.93	A	O
ATOM	2293	N	LYS	471	17.020	19.240	0.097	1.00	47.24	A	N
ATOM	2294	CA	LYS	471	17.763	18.170	0.754	1.00	46.31	A	C
ATOM	2295	CB	LYS	471	18.356	17.221	-0.292	1.00	48.63	A	C
ATOM	2296	CG	LYS	471	17.345	16.752	-1.329	1.00	55.07	A	C
ATOM	2297	CD	LYS	471	17.943	15.742	-2.301	1.00	59.87	A	C
ATOM	2298	CE	LYS	471	17.002	15.475	-3.474	1.00	61.38	A	C
ATOM	2299	NZ	LYS	471	16.824	16.689	-4.334	1.00	63.12	A	N
ATOM	2300	C	LYS	471	18.875	18.717	1.645	1.00	43.10	A	C
ATOM	2301	O	LYS	471	19.124	18.192	2.730	1.00	41.14	A	O
ATOM	2302	N	VAL	472	19.520	19.790	1.190	1.00	39.61	A	N
ATOM	2303	CA	VAL	472	20.602	20.418	1.940	1.00	37.76	A	C
ATOM	2304	CB	VAL	472	21.416	21.400	1.049	1.00	36.54	A	C
ATOM	2305	CG1	VAL	472	22.506	22.080	1.856	1.00	35.02	A	C
ATOM	2306	CG2	VAL	472	22.034	20.654	-0.122	1.00	34.69	A	C
ATOM	2307	C	VAL	472	20.062	21.144	3.172	1.00	37.04	A	C
ATOM	2308	O	VAL	472	20.711	21.164	4.220	1.00	40.28	A	O
ATOM	2309	N	ARG	473	18.871	21.722	3.056	1.00	34.64	A	N
ATOM	2310	CA	ARG	473	18.267	22.434	4.178	1.00	32.96	A	C
ATOM	2311	CB	ARG	473	17.057	23.255	3.725	1.00	35.34	A	C
ATOM	2312	CG	ARG	473	17.422	24.517	2.967	1.00	38.89	A	C
ATOM	2313	CD	ARG	473	16.202	25.390	2.721	1.00	40.75	A	C
ATOM	2314	NE	ARG	473	16.576	26.650	2.087	1.00	44.46	A	N
ATOM	2315	CZ	ARG	473	15.939	27.803	2.265	1.00	46.31	A	C
ATOM	2316	NH1	ARG	473	14.877	27.869	3.059	1.00	46.59	A	N
ATOM	2317	NH2	ARG	473	16.395	28.903	1.680	1.00	47.94	A	N
ATOM	2318	C	ARG	473	17.852	21.470	5.281	1.00	30.65	A	C
ATOM	2319	O	ARG	473	18.066	21.729	6.467	1.00	27.27	A	O
ATOM	2320	N	GLN	474	17.261	20.356	4.875	1.00	28.35	A	N
ATOM	2321	CA	GLN	474	16.825	19.347	5.818	1.00	31.11	A	C
ATOM	2322	CB	GLN	474	16.040	18.271	5.088	1.00	29.85	A	C
ATOM	2323	CG	GLN	474	14.699	18.741	4.563	1.00	31.43	A	C
ATOM	2324	CD	GLN	474	13.883	17.598	4.010	1.00	33.91	A	C
ATOM	2325	OE1	GLN	474	14.329	16.459	4.029	1.00	32.80	A	O
ATOM	2326	NE2	GLN	474	12.676	17.891	3.534	1.00	35.62	A	N
ATOM	2327	C	GLN	474	18.014	18.732	6.554	1.00	30.49	A	C
ATOM	2328	O	GLN	474	17.979	18.559	7.772	1.00	31.83	A	O
ATOM	2329	N	ARG	475	19.080	18.470	5.804	1.00	30.48	A	N
ATOM	2330	CA	ARG	475	20.304	17.882	6.332	1.00	30.78	A	C
ATOM	2331	CB	ARG	475	21.278	17.634	5.183	1.00	34.33	A	C
ATOM	2332	CG	ARG	475	22.462	16.767	5.519	1.00	36.79	A	C
ATOM	2333	CD	ARG	475	23.274	16.492	4.271	1.00	40.73	A	C
ATOM	2334	NE	ARG	475	23.898	17.702	3.738	1.00	46.48	A	N
ATOM	2335	CZ	ARG	475	24.609	17.750	2.613	1.00	49.75	A	C
ATOM	2336	NH1	ARG	475	24.790	16.655	1.883	1.00	52.42	A	N
ATOM	2337	NH2	ARG	475	25.170	18.889	2.231	1.00	52.81	A	N
ATOM	2338	C	ARG	475	20.919	18.819	7.365	1.00	30.20	A	C
ATOM	2339	O	ARG	475	21.371	18.378	8.427	1.00	28.90	A	O
ATOM	2340	N	ALA	476	20.885	20.115	7.064	1.00	27.29	A	N
ATOM	2341	CA	ALA	476	21.419	21.134	7.959	1.00	28.53	A	C
ATOM	2342	CB	ALA	476	21.539	22.459	7.233	1.00	27.99	A	C
ATOM	2343	C	ALA	476	20.566	21.290	9.219	1.00	28.06	A	C
ATOM	2344	O	ALA	476	21.103	21.466	10.313	1.00	31.54	A	O
ATOM	2345	N	VAL	477	19.244	21.229	9.063	1.00	26.65	A	N
ATOM	2346	CA	VAL	477	18.331	21.345	10.197	1.00	26.16	A	C
ATOM	2347	CB	VAL	477	16.866	21.510	9.729	1.00	24.46	A	C
ATOM	2348	CG1	VAL	477	15.904	21.385	10.907	1.00	21.06	A	C
ATOM	2349	CG2	VAL	477	16.695	22.867	9.058	1.00	24.00	A	C
ATOM	2350	C	VAL	477	18.468	20.112	11.101	1.00	27.40	A	C
ATOM	2351	O	VAL	477	18.534	20.240	12.326	1.00	27.27	A	O
ATOM	2352	N	ALA	478	18.532	18.930	10.492	1.00	24.59	A	N
ATOM	2353	CA	ALA	478	18.696	17.688	11.249	1.00	26.40	A	C
ATOM	2354	CB	ALA	478	18.761	16.502	10.310	1.00	24.17	A	C
ATOM	2355	C	ALA	478	19.982	17.785	12.064	1.00	27.99	A	C
ATOM	2356	O	ALA	478	19.987	17.507	13.261	1.00	30.91	A	O

ATOM	2357	N	LEU	479	21.057	18.235	11.419	1.00	28.95	A	N
ATOM	2358	CA	LEU	479	22.346	18.396	12.087	1.00	29.61	A	C
ATOM	2359	CB	LEU	479	23.367	19.006	11.130	1.00	33.29	A	C
ATOM	2360	CG	LEU	479	24.005	18.030	10.157	1.00	37.05	A	C
ATOM	2361	CD1	LEU	479	24.805	18.760	9.084	1.00	41.98	A	C
ATOM	2362	CD2	LEU	479	24.876	17.084	10.946	1.00	42.47	A	C
ATOM	2363	C	LEU	479	22.215	19.294	13.305	1.00	29.66	A	C
ATOM	2364	O	LEU	479	22.841	19.047	14.334	1.00	26.55	A	O
ATOM	2365	N	TYR	480	21.409	20.346	13.156	1.00	29.63	A	N
ATOM	2366	CA	TYR	480	21.157	21.317	14.214	1.00	29.70	A	C
ATOM	2367	CB	TYR	480	20.247	22.435	13.686	1.00	30.50	A	C
ATOM	2368	CG	TYR	480	19.858	23.499	14.702	1.00	30.06	A	C
ATOM	2369	CD1	TYR	480	20.814	24.356	15.254	1.00	32.33	A	C
ATOM	2370	CE1	TYR	480	20.445	25.384	16.140	1.00	32.36	A	C
ATOM	2371	CD2	TYR	480	18.520	23.685	15.065	1.00	31.72	A	C
ATOM	2372	CE2	TYR	480	18.139	24.701	15.949	1.00	32.04	A	C
ATOM	2373	CZ	TYR	480	19.105	25.548	16.479	1.00	34.33	A	C
ATOM	2374	OH	TYR	480	18.724	26.564	17.335	1.00	38.42	A	O
ATOM	2375	C	TYR	480	20.516	20.654	15.431	1.00	30.09	A	C
ATOM	2376	O	TYR	480	20.897	20.946	16.566	1.00	28.14	A	O
ATOM	2377	N	PHE	481	19.542	19.775	15.185	1.00	29.80	A	N
ATOM	2378	CA	PHE	481	18.842	19.069	16.257	1.00	31.20	A	C
ATOM	2379	CB	PHE	481	17.666	18.262	15.699	1.00	34.47	A	C
ATOM	2380	CG	PHE	481	16.491	19.099	15.256	1.00	38.95	A	C
ATOM	2381	CD1	PHE	481	16.477	20.481	15.445	1.00	38.58	A	C
ATOM	2382	CD2	PHE	481	15.400	18.496	14.628	1.00	40.88	A	C
ATOM	2383	CE1	PHE	481	15.402	21.249	15.014	1.00	39.09	A	C
ATOM	2384	CE2	PHE	481	14.317	19.258	14.192	1.00	41.01	A	C
ATOM	2385	CZ	PHE	481	14.321	20.639	14.387	1.00	41.38	A	C
ATOM	2386	C	PHE	481	19.789	18.123	16.983	1.00	30.12	A	C
ATOM	2387	O	PHE	481	19.853	18.113	18.206	1.00	30.00	A	O
ATOM	2388	N	ILE	482	20.533	17.344	16.207	1.00	30.42	A	N
ATOM	2389	CA	ILE	482	21.486	16.386	16.747	1.00	33.26	A	C
ATOM	2390	CB	ILE	482	22.162	15.583	15.607	1.00	33.71	A	C
ATOM	2391	CG2	ILE	482	23.254	14.675	16.161	1.00	33.61	A	C
ATOM	2392	CG1	ILE	482	21.105	14.754	14.862	1.00	32.31	A	C
ATOM	2393	CD1	ILE	482	21.641	14.010	13.679	1.00	29.43	A	C
ATOM	2394	C	ILE	482	22.545	17.083	17.592	1.00	35.30	A	C
ATOM	2395	O	ILE	482	22.918	16.589	18.647	1.00	37.56	A	O
ATOM	2396	N	ASP	483	22.975	18.261	17.156	1.00	35.09	A	N
ATOM	2397	CA	ASP	483	23.995	19.007	17.869	1.00	37.98	A	C
ATOM	2398	CB	ASP	483	24.698	19.973	16.910	1.00	41.89	A	C
ATOM	2399	CG	ASP	483	25.815	20.750	17.578	1.00	44.43	A	C
ATOM	2400	OD1	ASP	483	26.634	20.128	18.287	1.00	48.40	A	O
ATOM	2401	OD2	ASP	483	25.877	21.984	17.397	1.00	47.54	A	O
ATOM	2402	C	ASP	483	23.484	19.764	19.098	1.00	39.37	A	C
ATOM	2403	O	ASP	483	24.006	19.593	20.203	1.00	40.28	A	O
ATOM	2404	N	LYS	484	22.477	20.606	18.899	1.00	39.67	A	N
ATOM	2405	CA	LYS	484	21.915	21.405	19.984	1.00	41.13	A	C
ATOM	2406	CB	LYS	484	20.993	22.489	19.419	1.00	42.27	A	C
ATOM	2407	CG	LYS	484	20.466	23.480	20.456	1.00	45.79	A	C
ATOM	2408	CD	LYS	484	19.453	24.443	19.835	1.00	50.34	A	C
ATOM	2409	CE	LYS	484	19.095	25.597	20.772	1.00	53.36	A	C
ATOM	2410	NZ	LYS	484	18.452	25.144	22.038	1.00	54.98	A	N
ATOM	2411	C	LYS	484	21.153	20.579	21.018	1.00	40.53	A	C
ATOM	2412	O	LYS	484	21.381	20.722	22.222	1.00	39.57	A	O
ATOM	2413	N	LEU	485	20.252	19.719	20.548	1.00	41.02	A	N
ATOM	2414	CA	LEU	485	19.441	18.893	21.445	1.00	41.26	A	C
ATOM	2415	CB	LEU	485	17.994	18.859	20.960	1.00	43.27	A	C
ATOM	2416	CG	LEU	485	17.299	20.218	20.880	1.00	45.62	A	C
ATOM	2417	CD1	LEU	485	15.844	20.011	20.513	1.00	47.56	A	C
ATOM	2418	CD2	LEU	485	17.413	20.953	22.211	1.00	44.66	A	C
ATOM	2419	C	LEU	485	19.943	17.468	21.679	1.00	41.98	A	C
ATOM	2420	O	LEU	485	19.313	16.694	22.407	1.00	39.78	A	O
ATOM	2421	N	ALA	486	21.071	17.126	21.060	1.00	41.52	A	N
ATOM	2422	CA	ALA	486	21.673	15.803	21.205	1.00	41.15	A	C
ATOM	2423	CB	ALA	486	22.270	15.647	22.610	1.00	41.46	A	C
ATOM	2424	C	ALA	486	20.725	14.639	20.890	1.00	40.14	A	C
ATOM	2425	O	ALA	486	20.778	13.593	21.541	1.00	41.76	A	O
ATOM	2426	N	LEU	487	19.859	14.828	19.896	1.00	37.75	A	N
ATOM	2427	CA	LEU	487	18.920	13.785	19.486	1.00	33.47	A	C
ATOM	2428	CB	LEU	487	17.845	14.357	18.556	1.00	31.57	A	C
ATOM	2429	CG	LEU	487	16.885	15.387	19.175	1.00	32.53	A	C
ATOM	2430	CD1	LEU	487	15.961	15.967	18.116	1.00	30.24	A	C
ATOM	2431	CD2	LEU	487	16.072	14.722	20.275	1.00	32.69	A	C
ATOM	2432	C	LEU	487	19.677	12.660	18.784	1.00	32.94	A	C



ATOM	2433	O	LEU	487	20.766	12.881	18.238	1.00	30.65	A	O
ATOM	2434	N	ARG	488	19.117	11.453	18.840	1.00	29.41	A	N
ATOM	2435	CA	ARG	488	19.728	10.280	18.214	1.00	29.48	A	C
ATOM	2436	CB	ARG	488	19.212	8.983	18.866	1.00	27.39	A	C
ATOM	2437	CG	ARG	488	19.580	8.808	20.332	1.00	23.65	A	C
ATOM	2438	CD	ARG	488	19.241	7.401	20.831	1.00	27.84	A	C
ATOM	2439	NE	ARG	488	19.543	7.235	22.251	1.00	24.77	A	N
ATOM	2440	CZ	ARG	488	18.728	7.590	23.242	1.00	27.80	A	C
ATOM	2441	NH1	ARG	488	17.539	8.134	22.982	1.00	28.96	A	N
ATOM	2442	NH2	ARG	488	19.111	7.434	24.502	1.00	27.15	A	N
ATOM	2443	C	ARG	488	19.444	10.239	16.714	1.00	30.11	A	C
ATOM	2444	O	ARG	488	18.464	10.820	16.245	1.00	27.90	A	O
ATOM	2445	N	ALA	489	20.302	9.545	15.969	1.00	31.26	A	N
ATOM	2446	CA	ALA	489	20.143	9.404	14.521	1.00	35.30	A	C
ATOM	2447	CB	ALA	489	21.465	8.993	13.895	1.00	36.15	A	C
ATOM	2448	C	ALA	489	19.090	8.332	14.256	1.00	36.85	A	C
ATOM	2449	O	ALA	489	19.424	7.182	13.950	1.00	40.76	A	O
ATOM	2450	N	GLY	490	17.825	8.716	14.351	1.00	34.70	A	N
ATOM	2451	CA	GLY	490	16.736	7.778	14.160	1.00	30.04	A	C
ATOM	2452	C	GLY	490	16.706	6.900	12.925	1.00	30.82	A	C
ATOM	2453	O	GLY	490	16.105	7.274	11.919	1.00	29.07	A	O
ATOM	2454	N	ASN	491	17.341	5.730	13.012	1.00	28.57	A	N
ATOM	2455	CA	ASN	491	17.355	4.760	11.918	1.00	32.06	A	C
ATOM	2456	CB	ASN	491	18.290	3.581	12.233	1.00	28.26	A	C
ATOM	2457	CG	ASN	491	19.731	3.860	11.861	1.00	30.32	A	C
ATOM	2458	OD1	ASN	491	20.115	3.760	10.693	1.00	31.74	A	O
ATOM	2459	ND2	ASN	491	20.538	4.215	12.848	1.00	26.63	A	N
ATOM	2460	C	ASN	491	15.944	4.213	11.764	1.00	34.43	A	C
ATOM	2461	O	ASN	491	15.287	3.896	12.754	1.00	33.16	A	O
ATOM	2462	N	GLU	492	15.471	4.120	10.528	1.00	38.57	A	N
ATOM	2463	CA	GLU	492	14.143	3.580	10.267	1.00	45.16	A	C
ATOM	2464	CB	GLU	492	13.840	3.619	8.766	1.00	48.68	A	C
ATOM	2465	CG	GLU	492	15.039	3.298	7.865	1.00	58.64	A	C
ATOM	2466	CD	GLU	492	16.062	4.438	7.793	1.00	62.46	A	C
ATOM	2467	OE1	GLU	492	17.250	4.206	8.119	1.00	63.71	A	O
ATOM	2468	OE2	GLU	492	15.674	5.567	7.413	1.00	65.35	A	O
ATOM	2469	C	GLU	492	14.055	2.136	10.785	1.00	46.06	A	C
ATOM	2470	O	GLU	492	15.078	1.466	10.946	1.00	45.69	A	O
ATOM	2471	N	LYS	493	12.846	1.687	11.106	1.00	46.37	A	N
ATOM	2472	CA	LYS	493	12.642	0.326	11.589	1.00	49.10	A	C
ATOM	2473	CB	LYS	493	12.602	0.283	13.123	1.00	49.63	A	C
ATOM	2474	CG	LYS	493	11.602	1.229	13.763	1.00	50.61	A	C
ATOM	2475	CD	LYS	493	12.305	2.259	14.633	1.00	51.74	A	C
ATOM	2476	CE	LYS	493	12.873	1.642	15.902	1.00	50.35	A	C
ATOM	2477	NZ	LYS	493	11.806	1.191	16.840	1.00	50.50	A	N
ATOM	2478	C	LYS	493	11.370	-0.272	10.995	1.00	50.54	A	C
ATOM	2479	O	LYS	493	10.508	0.453	10.497	1.00	48.93	A	O
ATOM	2480	N	GLU	494	11.266	-1.596	11.033	1.00	52.94	A	N
ATOM	2481	CA	GLU	494	10.102	-2.288	10.487	1.00	56.41	A	C
ATOM	2482	CB	GLU	494	10.410	-3.775	10.309	1.00	59.14	A	C
ATOM	2483	CG	GLU	494	11.490	-4.054	9.265	1.00	64.43	A	C
ATOM	2484	CD	GLU	494	12.027	-5.482	9.306	1.00	67.52	A	C
ATOM	2485	OE1	GLU	494	11.317	-6.391	9.795	1.00	67.86	A	O
ATOM	2486	OE2	GLU	494	13.170	-5.693	8.840	1.00	69.55	A	O
ATOM	2487	C	GLU	494	8.851	-2.097	11.341	1.00	57.57	A	C
ATOM	2488	O	GLU	494	8.857	-2.362	12.548	1.00	57.39	A	O
ATOM	2489	N	GLU	495	7.788	-1.603	10.709	1.00	58.41	A	N
ATOM	2490	CA	GLU	495	6.524	-1.367	11.400	1.00	59.84	A	C
ATOM	2491	CB	GLU	495	5.574	-0.525	10.533	1.00	63.02	A	C
ATOM	2492	CG	GLU	495	5.211	-1.143	9.181	1.00	67.75	A	C
ATOM	2493	CD	GLU	495	4.063	-0.419	8.483	1.00	71.12	A	C
ATOM	2494	OE1	GLU	495	2.933	-0.427	9.022	1.00	71.51	A	O
ATOM	2495	OE2	GLU	495	4.287	0.149	7.389	1.00	71.99	A	O
ATOM	2496	C	GLU	495	5.859	-2.684	11.791	1.00	58.38	A	C
ATOM	2497	O	GLU	495	5.744	-3.603	10.977	1.00	59.04	A	O
ATOM	2498	N	GLY	496	5.445	-2.776	13.049	1.00	56.15	A	N
ATOM	2499	CA	GLY	496	4.799	-3.983	13.529	1.00	54.02	A	C
ATOM	2500	C	GLY	496	5.762	-5.042	14.035	1.00	51.46	A	C
ATOM	2501	O	GLY	496	5.343	-6.149	14.364	1.00	51.13	A	O
ATOM	2502	N	GLU	497	7.049	-4.709	14.099	1.00	48.49	A	N
ATOM	2503	CA	GLU	497	8.060	-5.647	14.576	1.00	46.11	A	C
ATOM	2504	CB	GLU	497	9.111	-5.891	13.489	1.00	49.23	A	C
ATOM	2505	CG	GLU	497	8.573	-6.569	12.232	1.00	51.31	A	C
ATOM	2506	CD	GLU	497	8.069	-7.981	12.486	1.00	54.93	A	C
ATOM	2507	OE1	GLU	497	8.907	-8.907	12.582	1.00	56.76	A	O
ATOM	2508	OE2	GLU	497	6.835	-8.167	12.585	1.00	56.05	A	O

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ATOM	2509	C	GLU	497	8.738	-5.146	15.844	1.00	43.25	A	C
ATOM	2510	O	GLU	497	9.289	-5.925	16.625	1.00	43.55	A	O
ATOM	2511	N	THR	498	8.673	-3.837	16.052	1.00	39.61	A	N
ATOM	2512	CA	THR	498	9.285	-3.196	17.209	1.00	36.47	A	C
ATOM	2513	CB	THR	498	10.605	-2.485	16.798	1.00	38.62	A	C
ATOM	2514	OG1	THR	498	10.337	-1.568	15.727	1.00	38.22	A	O
ATOM	2515	CG2	THR	498	11.658	-3.500	16.325	1.00	38.04	A	O
ATOM	2516	C	THR	498	8.329	-2.138	17.759	1.00	34.93	A	C
ATOM	2517	O	THR	498	7.350	-1.774	17.104	1.00	33.09	A	O
ATOM	2518	N	ALA	499	8.603	-1.659	18.968	1.00	31.72	A	N
ATOM	2519	CA	ALA	499	7.781	-0.614	19.567	1.00	30.52	A	C
ATOM	2520	CB	ALA	499	8.210	-0.357	21.002	1.00	28.25	A	C
ATOM	2521	C	ALA	499	7.987	0.638	18.709	1.00	30.40	A	C
ATOM	2522	O	ALA	499	9.051	0.822	18.124	1.00	29.89	A	O
ATOM	2523	N	ASP	500	6.951	1.457	18.580	1.00	30.67	A	N
ATOM	2524	CA	ASP	500	7.043	2.670	17.772	1.00	30.51	A	C
ATOM	2525	CB	ASP	500	5.634	3.163	17.398	1.00	32.72	A	C
ATOM	2526	CG	ASP	500	5.648	4.365	16.453	1.00	37.87	A	C
ATOM	2527	OD1	ASP	500	6.722	4.708	15.904	1.00	39.10	A	O
ATOM	2528	OD2	ASP	500	4.569	4.966	16.248	1.00	38.51	A	O
ATOM	2529	C	ASP	500	7.820	3.770	18.496	1.00	28.73	A	C
ATOM	2530	O	ASP	500	7.289	4.433	19.383	1.00	30.08	A	O
ATOM	2531	N	THR	501	9.093	3.924	18.143	1.00	26.51	A	N
ATOM	2532	CA	THR	501	9.936	4.963	18.736	1.00	27.91	A	C
ATOM	2533	CB	THR	501	10.972	4.408	19.749	1.00	29.38	A	C
ATOM	2534	OG1	THR	501	11.850	3.485	19.090	1.00	30.65	A	O
ATOM	2535	CG2	THR	501	10.267	3.723	20.923	1.00	27.67	A	C
ATOM	2536	C	THR	501	10.663	5.643	17.591	1.00	26.56	A	C
ATOM	2537	O	THR	501	10.770	5.078	16.504	1.00	25.82	A	O
ATOM	2538	N	VAL	502	11.169	6.847	17.830	1.00	23.29	A	N
ATOM	2539	CA	VAL	502	11.843	7.576	16.769	1.00	26.48	A	C
ATOM	2540	CB	VAL	502	10.867	8.573	16.070	1.00	28.50	A	C
ATOM	2541	CG1	VAL	502	9.768	7.822	15.326	1.00	29.03	A	C
ATOM	2542	CG2	VAL	502	10.253	9.515	17.097	1.00	27.75	A	C
ATOM	2543	C	VAL	502	13.065	8.358	17.204	1.00	25.20	A	C
ATOM	2544	O	VAL	502	13.294	8.587	18.388	1.00	23.82	A	O
ATOM	2545	N	GLY	503	13.842	8.769	16.212	1.00	28.19	A	N
ATOM	2546	CA	GLY	503	15.030	9.567	16.454	1.00	30.83	A	C
ATOM	2547	C	GLY	503	14.927	10.826	15.612	1.00	31.40	A	C
ATOM	2548	O	GLY	503	13.842	11.168	15.158	1.00	32.85	A	O
ATOM	2549	N	CYS	504	16.048	11.498	15.373	1.00	32.89	A	N
ATOM	2550	CA	CYS	504	16.050	12.726	14.584	1.00	34.41	A	C
ATOM	2551	CB	CYS	504	17.429	13.375	14.621	1.00	39.27	A	C
ATOM	2552	SG	CYS	504	17.545	14.860	13.587	1.00	47.22	A	S
ATOM	2553	C	CYS	504	15.609	12.553	13.126	1.00	34.57	A	C
ATOM	2554	O	CYS	504	14.652	13.191	12.686	1.00	32.28	A	O
ATOM	2555	N	CYS	505	16.301	11.683	12.390	1.00	32.79	A	N
ATOM	2556	CA	CYS	505	15.991	11.439	10.983	1.00	35.22	A	C
ATOM	2557	CB	CYS	505	17.147	10.706	10.293	1.00	35.17	A	C
ATOM	2558	SG	CYS	505	18.718	11.600	10.314	1.00	42.19	A	S
ATOM	2559	C	CYS	505	14.686	10.690	10.717	1.00	33.73	A	C
ATOM	2560	O	CYS	505	14.326	10.478	9.557	1.00	36.15	A	O
ATOM	2561	N	SER	506	13.991	10.269	11.771	1.00	31.50	A	N
ATOM	2562	CA	SER	506	12.733	9.553	11.598	1.00	29.87	A	C
ATOM	2563	CB	SER	506	12.847	8.110	12.098	1.00	31.10	A	C
ATOM	2564	OG	SER	506	13.221	8.063	13.458	1.00	32.88	A	O
ATOM	2565	C	SER	506	11.559	10.270	12.258	1.00	29.77	A	C
ATOM	2566	O	SER	506	10.505	9.681	12.494	1.00	25.80	A	O
ATOM	2567	N	LEU	507	11.756	11.547	12.564	1.00	31.55	A	N
ATOM	2568	CA	LEU	507	10.700	12.350	13.164	1.00	33.59	A	C
ATOM	2569	CB	LEU	507	11.218	13.739	13.531	1.00	33.73	A	C
ATOM	2570	CG	LEU	507	11.994	13.809	14.844	1.00	36.47	A	C
ATOM	2571	CD1	LEU	507	12.612	15.185	15.010	1.00	38.37	A	C
ATOM	2572	CD2	LEU	507	11.064	13.488	16.000	1.00	34.31	A	C
ATOM	2573	C	LEU	507	9.550	12.492	12.183	1.00	31.93	A	C
ATOM	2574	O	LEU	507	9.765	12.546	10.974	1.00	33.24	A	O
ATOM	2575	N	ARG	508	8.329	12.440	12.700	1.00	30.72	A	N
ATOM	2576	CA	ARG	508	7.152	12.608	11.863	1.00	32.32	A	C
ATOM	2577	CB	ARG	508	6.098	11.541	12.149	1.00	32.60	A	C
ATOM	2578	CG	ARG	508	6.521	10.147	11.759	1.00	36.42	A	C
ATOM	2579	CD	ARG	508	5.391	9.165	11.964	1.00	38.72	A	C
ATOM	2580	NE	ARG	508	5.929	7.859	12.280	1.00	42.78	A	N
ATOM	2581	CZ	ARG	508	5.919	7.326	13.495	1.00	41.63	A	C
ATOM	2582	NH1	ARG	508	5.372	7.979	14.511	1.00	40.49	A	N
ATOM	2583	NH2	ARG	508	6.548	6.185	13.705	1.00	41.47	A	N
ATOM	2584	C	ARG	508	6.572	13.982	12.132	1.00	31.56	A	C

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ATOM	2585	O	ARG	508	6.857	14.601	13.163	1.00	27.86	A	O
ATOM	2586	N	VAL	509	5.752	14.451	11.203	1.00	33.22	A	N
ATOM	2587	CA	VAL	509	5.121	15.756	11.328	1.00	34.21	A	C
ATOM	2588	CB	VAL	509	4.119	15.995	10.178	1.00	34.77	A	C
ATOM	2589	CG1	VAL	509	3.439	17.338	10.339	1.00	36.09	A	C
ATOM	2590	CG2	VAL	509	4.838	15.935	8.846	1.00	34.98	A	C
ATOM	2591	C	VAL	509	4.415	15.897	12.674	1.00	34.15	A	C
ATOM	2592	O	VAL	509	4.551	16.919	13.342	1.00	35.00	A	O
ATOM	2593	N	GLU	510	3.751	14.826	13.101	1.00	34.62	A	N
ATOM	2594	CA	GLU	510	3.005	14.790	14.358	1.00	37.10	A	C
ATOM	2595	CB	GLU	510	2.206	13.492	14.440	1.00	40.78	A	C
ATOM	2596	CG	GLU	510	3.074	12.258	14.650	1.00	43.89	A	C
ATOM	2597	CD	GLU	510	2.312	10.964	14.460	1.00	48.10	A	C
ATOM	2598	OE1	GLU	510	1.120	10.908	14.838	1.00	50.31	A	O
ATOM	2599	OE2	GLU	510	2.908	10.002	13.925	1.00	49.56	A	O
ATOM	2600	C	GLU	510	3.848	14.911	15.625	1.00	37.13	A	C
ATOM	2601	O	GLU	510	3.304	15.084	16.716	1.00	37.35	A	O
ATOM	2602	N	HIS	511	5.165	14.792	15.489	1.00	36.62	A	N
ATOM	2603	CA	HIS	511	6.055	14.866	16.641	1.00	34.85	A	C
ATOM	2604	CB	HIS	511	7.255	13.949	16.442	1.00	32.41	A	C
ATOM	2605	CG	HIS	511	6.888	12.500	16.427	1.00	32.02	A	C
ATOM	2606	CD2	HIS	511	6.023	11.795	17.194	1.00	30.99	A	C
ATOM	2607	ND1	HIS	511	7.399	11.611	15.509	1.00	32.16	A	N
ATOM	2608	CE1	HIS	511	6.862	10.420	15.707	1.00	33.34	A	C
ATOM	2609	NE2	HIS	511	6.023	10.505	16.724	1.00	34.21	A	N
ATOM	2610	C	HIS	511	6.495	16.256	17.050	1.00	35.45	A	C
ATOM	2611	O	HIS	511	7.141	16.425	18.084	1.00	36.48	A	O
ATOM	2612	N	ILE	512	6.154	17.249	16.239	1.00	35.85	A	N
ATOM	2613	CA	ILE	512	6.499	18.626	16.557	1.00	38.24	A	C
ATOM	2614	CB	ILE	512	7.724	19.139	15.757	1.00	38.50	A	C
ATOM	2615	CG2	ILE	512	8.915	18.220	15.960	1.00	39.82	A	C
ATOM	2616	CG1	ILE	512	7.390	19.275	14.269	1.00	37.79	A	C
ATOM	2617	CD1	ILE	512	8.346	20.183	13.524	1.00	35.27	A	C
ATOM	2618	C	ILE	512	5.322	19.573	16.324	1.00	39.78	A	C
ATOM	2619	O	ILE	512	4.458	19.331	15.477	1.00	38.98	A	O
ATOM	2620	N	ASN	513	5.285	20.631	17.121	1.00	42.60	A	N
ATOM	2621	CA	ASN	513	4.251	21.652	17.027	1.00	46.81	A	C
ATOM	2622	CB	ASN	513	3.285	21.559	18.215	1.00	49.09	A	C
ATOM	2623	CG	ASN	513	2.394	20.332	18.145	1.00	51.93	A	C
ATOM	2624	OD1	ASN	513	1.629	20.162	17.196	1.00	54.80	A	O
ATOM	2625	ND2	ASN	513	2.495	19.463	19.145	1.00	51.92	A	N
ATOM	2626	C	ASN	513	4.973	22.994	17.020	1.00	47.99	A	C
ATOM	2627	O	ASN	513	5.766	23.289	17.919	1.00	47.76	A	O
ATOM	2628	N	LEU	514	4.721	23.785	15.981	1.00	48.99	A	N
ATOM	2629	CA	LEU	514	5.358	25.087	15.825	1.00	49.61	A	C
ATOM	2630	CB	LEU	514	5.550	25.386	14.339	1.00	50.18	A	C
ATOM	2631	CG	LEU	514	6.241	24.290	13.524	1.00	50.89	A	C
ATOM	2632	CD1	LEU	514	6.220	24.664	12.066	1.00	52.34	A	C
ATOM	2633	CD2	LEU	514	7.667	24.078	13.996	1.00	51.84	A	C
ATOM	2634	C	LEU	514	4.590	26.223	16.503	1.00	50.62	A	C
ATOM	2635	O	LEU	514	3.371	26.338	16.365	1.00	48.38	A	O
ATOM	2636	N	HIS	515	5.323	27.061	17.231	1.00	52.18	A	N
ATOM	2637	CA	HIS	515	4.742	28.194	17.945	1.00	54.59	A	C
ATOM	2638	CB	HIS	515	4.660	27.894	19.442	1.00	53.65	A	C
ATOM	2639	CG	HIS	515	3.635	26.867	19.793	1.00	55.79	A	C
ATOM	2640	CD2	HIS	515	2.376	26.674	19.336	1.00	56.38	A	C
ATOM	2641	ND1	HIS	515	3.860	25.881	20.729	1.00	56.54	A	N
ATOM	2642	CE1	HIS	515	2.782	25.126	20.835	1.00	56.90	A	C
ATOM	2643	NE2	HIS	515	1.867	25.585	20.000	1.00	57.96	A	N
ATOM	2644	C	HIS	515	5.535	29.479	17.737	1.00	56.13	A	C
ATOM	2645	O	HIS	515	6.655	29.614	18.234	1.00	55.82	A	O
ATOM	2646	N	PRO	516	4.951	30.450	17.013	1.00	57.76	A	N
ATOM	2647	CD	PRO	516	3.653	30.358	16.319	1.00	57.73	A	C
ATOM	2648	CA	PRO	516	5.595	31.738	16.736	1.00	58.16	A	C
ATOM	2649	CB	PRO	516	4.514	32.491	15.966	1.00	58.85	A	C
ATOM	2650	CG	PRO	516	3.805	31.387	15.234	1.00	58.82	A	C
ATOM	2651	C	PRO	516	5.988	32.469	18.022	1.00	59.31	A	C
ATOM	2652	O	PRO	516	6.975	33.208	18.051	1.00	58.58	A	O
ATOM	2653	N	GLU	517	5.228	32.226	19.086	1.00	61.19	A	N
ATOM	2654	CA	GLU	517	5.479	32.839	20.384	1.00	64.41	A	C
ATOM	2655	CB	GLU	517	4.853	34.239	20.443	1.00	66.51	A	C
ATOM	2656	CG	GLU	517	5.167	35.019	21.718	1.00	71.05	A	C
ATOM	2657	CD	GLU	517	4.469	36.372	21.773	1.00	74.42	A	C
ATOM	2658	OE1	GLU	517	5.072	37.376	21.328	1.00	75.64	A	O
ATOM	2659	OE2	GLU	517	3.318	36.432	22.265	1.00	74.75	A	O
ATOM	2660	C	GLU	517	4.885	31.947	21.473	1.00	65.21	A	C

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ATOM	2661	O	GLU	517	3.756	31.473	21.344	1.00	64.59	A	O
ATOM	2662	N	LEU	518	5.653	31.716	22.536	1.00	66.72	A	N
ATOM	2663	CA	LEU	518	5.214	30.874	23.647	1.00	68.77	A	C
ATOM	2664	CB	LEU	518	5.427	29.395	23.298	1.00	67.92	A	C
ATOM	2665	CG	LEU	518	4.350	28.376	23.683	1.00	66.86	A	C
ATOM	2666	CD1	LEU	518	4.090	28.406	25.181	1.00	66.70	A	C
ATOM	2667	CD2	LEU	518	3.072	28.670	22.918	1.00	67.48	A	C
ATOM	2668	C	LEU	518	6.010	31.228	24.904	1.00	70.94	A	C
ATOM	2669	O	LEU	518	7.240	31.196	24.888	1.00	71.45	A	O
ATOM	2670	N	ASP	519	5.301	31.547	25.988	1.00	72.80	A	N
ATOM	2671	CA	ASP	519	5.923	31.919	27.263	1.00	74.62	A	C
ATOM	2672	CB	ASP	519	6.768	30.765	27.825	1.00	76.98	A	C
ATOM	2673	CG	ASP	519	5.927	29.620	28.363	1.00	79.18	A	C
ATOM	2674	OD1	ASP	519	4.887	29.885	29.006	1.00	80.15	A	O
ATOM	2675	OD2	ASP	519	6.322	28.451	28.157	1.00	79.45	A	O
ATOM	2676	C	ASP	519	6.798	33.165	27.132	1.00	75.00	A	C
ATOM	2677	O	ASP	519	7.734	33.365	27.914	1.00	75.47	A	O
ATOM	2678	N	GLY	520	6.480	34.007	26.153	1.00	74.29	A	N
ATOM	2679	CA	GLY	520	7.260	35.210	25.926	1.00	73.37	A	C
ATOM	2680	C	GLY	520	8.480	34.907	25.075	1.00	73.23	A	C
ATOM	2681	O	GLY	520	9.297	35.792	24.807	1.00	73.70	A	O
ATOM	2682	N	GLN	521	8.600	33.646	24.659	1.00	71.89	A	N
ATOM	2683	CA	GLN	521	9.712	33.187	23.832	1.00	69.79	A	C
ATOM	2684	CB	GLN	521	10.146	31.786	24.261	1.00	71.32	A	C
ATOM	2685	CG	GLN	521	10.580	31.696	25.711	1.00	73.98	A	C
ATOM	2686	CD	GLN	521	10.704	30.267	26.193	1.00	76.23	A	C
ATOM	2687	OE1	GLN	521	9.701	29.609	26.484	1.00	77.58	A	O
ATOM	2688	NE2	GLN	521	11.937	29.776	26.286	1.00	76.75	A	N
ATOM	2689	C	GLN	521	9.319	33.186	22.361	1.00	67.74	A	C
ATOM	2690	O	GLN	521	8.184	32.864	22.007	1.00	66.41	A	O
ATOM	2691	N	GLU	522	10.280	33.523	21.510	1.00	66.51	A	N
ATOM	2692	CA	GLU	522	10.068	33.598	20.069	1.00	65.09	A	C
ATOM	2693	CB	GLU	522	10.806	34.815	19.493	1.00	67.92	A	C
ATOM	2694	CG	GLU	522	11.180	35.912	20.507	1.00	72.00	A	C
ATOM	2695	CD	GLU	522	12.323	35.521	21.452	1.00	73.40	A	C
ATOM	2696	OE1	GLU	522	13.078	34.568	21.148	1.00	73.98	A	O
ATOM	2697	OE2	GLU	522	12.463	36.176	22.508	1.00	73.90	A	O
ATOM	2698	C	GLU	522	10.541	32.346	19.332	1.00	62.78	A	C
ATOM	2699	O	GLU	522	11.616	31.814	19.619	1.00	62.54	A	O
ATOM	2700	N	TYR	523	9.741	31.907	18.361	1.00	59.92	A	N
ATOM	2701	CA	TYR	523	10.046	30.738	17.533	1.00	57.90	A	C
ATOM	2702	CB	TYR	523	11.207	31.057	16.582	1.00	59.86	A	C
ATOM	2703	CG	TYR	523	10.940	32.255	15.697	1.00	61.10	A	C
ATOM	2704	CD1	TYR	523	11.690	33.421	15.826	1.00	61.83	A	C
ATOM	2705	CE1	TYR	523	11.410	34.543	15.053	1.00	63.06	A	C
ATOM	2706	CD2	TYR	523	9.903	32.237	14.764	1.00	62.20	A	C
ATOM	2707	CE2	TYR	523	9.615	33.353	13.986	1.00	63.24	A	C
ATOM	2708	CZ	TYR	523	10.370	34.504	14.139	1.00	63.96	A	C
ATOM	2709	OH	TYR	523	10.066	35.626	13.402	1.00	65.49	A	O
ATOM	2710	C	TYR	523	10.333	29.469	18.334	1.00	55.19	A	C
ATOM	2711	O	TYR	523	11.440	28.931	18.310	1.00	54.80	A	O
ATOM	2712	N	VAL	524	9.312	28.996	19.037	1.00	51.97	A	N
ATOM	2713	CA	VAL	524	9.421	27.802	19.858	1.00	49.30	A	C
ATOM	2714	CB	VAL	524	8.619	27.960	21.171	1.00	50.98	A	C
ATOM	2715	CG1	VAL	524	8.557	26.636	21.928	1.00	52.16	A	C
ATOM	2716	CG2	VAL	524	9.251	29.031	22.038	1.00	50.03	A	C
ATOM	2717	C	VAL	524	8.931	26.562	19.125	1.00	46.23	A	C
ATOM	2718	O	VAL	524	7.876	26.576	18.488	1.00	44.52	A	O
ATOM	2719	N	VAL	525	9.738	25.508	19.180	1.00	44.07	A	N
ATOM	2720	CA	VAL	525	9.391	24.234	18.564	1.00	40.79	A	C
ATOM	2721	CB	VAL	525	10.548	23.668	17.716	1.00	41.55	A	C
ATOM	2722	CG1	VAL	525	10.145	22.326	17.105	1.00	38.06	A	C
ATOM	2723	CG2	VAL	525	10.921	24.653	16.523	1.00	39.57	A	C
ATOM	2724	C	VAL	525	9.082	23.285	19.714	1.00	39.12	A	C
ATOM	2725	O	VAL	525	9.883	23.132	20.637	1.00	35.66	A	O
ATOM	2726	N	GLU	526	7.904	22.677	19.672	1.00	38.45	A	N
ATOM	2727	CA	GLU	526	7.494	21.769	20.728	1.00	39.26	A	C
ATOM	2728	CB	GLU	526	6.050	22.065	21.130	1.00	43.11	A	C
ATOM	2729	CG	GLU	526	5.603	21.394	22.419	1.00	48.08	A	C
ATOM	2730	CD	GLU	526	4.131	21.639	22.736	1.00	52.30	A	C
ATOM	2731	OE1	GLU	526	3.582	20.918	23.595	1.00	53.39	A	O
ATOM	2732	OE2	GLU	526	3.520	22.547	22.130	1.00	51.95	A	O
ATOM	2733	C	GLU	526	7.648	20.306	20.334	1.00	36.24	A	C
ATOM	2734	O	GLU	526	6.837	19.770	19.587	1.00	36.89	A	O
ATOM	2735	N	PHE	527	8.703	19.677	20.842	1.00	35.24	A	N
ATOM	2736	CA	PHE	527	8.992	18.264	20.577	1.00	33.26	A	C

ATOM	2737	CB	PHE	527	10.495	17.980	20.701	1.00	33.94	A	C
ATOM	2738	CG	PHE	527	11.328	18.566	19.609	1.00	33.08	A	C
ATOM	2739	CD1	PHE	527	11.918	19.815	19.764	1.00	32.51	A	C
ATOM	2740	CD2	PHE	527	11.552	17.857	18.431	1.00	33.45	A	C
ATOM	2741	CE1	PHE	527	12.722	20.351	18.764	1.00	31.90	A	C
ATOM	2742	CE2	PHE	527	12.354	18.386	17.425	1.00	33.64	A	C
ATOM	2743	CZ	PHE	527	12.941	19.638	17.594	1.00	34.13	A	C
ATOM	2744	C	PHE	527	8.279	17.377	21.589	1.00	32.91	A	C
ATOM	2745	O	PHE	527	8.400	17.580	22.803	1.00	30.70	A	O
ATOM	2746	N	ASP	528	7.566	16.376	21.087	1.00	32.67	A	N
ATOM	2747	CA	ASP	528	6.865	15.432	21.950	1.00	31.75	A	C
ATOM	2748	CB	ASP	528	5.444	15.909	22.270	1.00	36.59	A	C
ATOM	2749	CG	ASP	528	4.828	15.176	23.466	1.00	44.33	A	C
ATOM	2750	OD1	ASP	528	5.391	14.147	23.918	1.00	45.22	A	O
ATOM	2751	OD2	ASP	528	3.781	15.642	23.972	1.00	45.96	A	O
ATOM	2752	C	ASP	528	6.829	14.097	21.233	1.00	28.72	A	C
ATOM	2753	O	ASP	528	6.127	13.934	20.233	1.00	26.67	A	O
ATOM	2754	N	PHE	529	7.606	13.143	21.738	1.00	25.32	A	N
ATOM	2755	CA	PHE	529	7.668	11.822	21.127	1.00	22.31	A	C
ATOM	2756	CB	PHE	529	8.375	11.892	19.763	1.00	21.03	A	C
ATOM	2757	CG	PHE	529	9.822	12.305	19.839	1.00	23.16	A	C
ATOM	2758	CD1	PHE	529	10.823	11.357	20.058	1.00	27.54	A	C
ATOM	2759	CD2	PHE	529	10.188	13.634	19.680	1.00	23.13	A	C
ATOM	2760	CE1	PHE	529	12.171	11.729	20.117	1.00	27.34	A	C
ATOM	2761	CE2	PHE	529	11.527	14.023	19.734	1.00	23.89	A	C
ATOM	2762	CZ	PHE	529	12.523	13.068	19.954	1.00	30.29	A	C
ATOM	2763	C	PHE	529	8.380	10.810	22.011	1.00	20.63	A	C
ATOM	2764	O	PHE	529	9.048	11.174	22.974	1.00	19.12	A	O
ATOM	2765	N	LEU	530	8.241	9.538	21.652	1.00	19.03	A	N
ATOM	2766	CA	LEU	530	8.883	8.449	22.380	1.00	22.94	A	C
ATOM	2767	CB	LEU	530	7.981	7.206	22.384	1.00	18.35	A	C
ATOM	2768	CG	LEU	530	6.595	7.399	22.987	1.00	20.98	A	C
ATOM	2769	CD1	LEU	530	5.904	6.042	23.163	1.00	21.80	A	C
ATOM	2770	CD2	LEU	530	6.746	8.084	24.336	1.00	24.71	A	C
ATOM	2771	C	LEU	530	10.205	8.113	21.693	1.00	22.91	A	C
ATOM	2772	O	LEU	530	10.228	7.814	20.502	1.00	23.37	A	O
ATOM	2773	N	GLY	531	11.302	8.210	22.437	1.00	24.38	A	N
ATOM	2774	CA	GLY	531	12.605	7.894	21.879	1.00	24.72	A	C
ATOM	2775	C	GLY	531	12.979	6.466	22.231	1.00	26.52	A	C
ATOM	2776	O	GLY	531	12.096	5.622	22.388	1.00	26.69	A	O
ATOM	2777	N	LYS	532	14.273	6.191	22.380	1.00	26.40	A	N
ATOM	2778	CA	LYS	532	14.731	4.838	22.727	1.00	27.13	A	C
ATOM	2779	CB	LYS	532	16.260	4.786	22.831	1.00	27.96	A	C
ATOM	2780	CG	LYS	532	16.793	3.403	23.200	1.00	30.51	A	C
ATOM	2781	CD	LYS	532	18.295	3.299	23.091	1.00	31.06	A	C
ATOM	2782	CE	LYS	532	18.735	1.881	23.448	1.00	33.64	A	C
ATOM	2783	NZ	LYS	532	20.197	1.692	23.303	1.00	35.77	A	N
ATOM	2784	C	LYS	532	14.119	4.350	24.038	1.00	24.70	A	C
ATOM	2785	O	LYS	532	13.918	5.137	24.960	1.00	25.32	A	O
ATOM	2786	N	ASP	533	13.809	3.053	24.103	1.00	26.74	A	N
ATOM	2787	CA	ASP	533	13.216	2.423	25.295	1.00	26.58	A	C
ATOM	2788	CB	ASP	533	14.165	2.556	26.503	1.00	29.75	A	C
ATOM	2789	CG	ASP	533	15.514	1.871	26.277	1.00	37.33	A	C
ATOM	2790	OD1	ASP	533	15.558	0.840	25.564	1.00	39.92	A	O
ATOM	2791	OD2	ASP	533	16.535	2.360	26.813	1.00	40.11	A	O
ATOM	2792	C	ASP	533	11.863	3.046	25.637	1.00	25.86	A	C
ATOM	2793	O	ASP	533	11.410	2.981	26.785	1.00	27.66	A	O
ATOM	2794	N	SER	534	11.238	3.670	24.640	1.00	24.06	A	N
ATOM	2795	CA	SER	534	9.952	4.339	24.812	1.00	26.60	A	C
ATOM	2796	CB	SER	534	8.848	3.322	25.116	1.00	27.25	A	C
ATOM	2797	OG	SER	534	8.640	2.472	24.001	1.00	27.88	A	O
ATOM	2798	C	SER	534	9.985	5.452	25.873	1.00	26.41	A	C
ATOM	2799	O	SER	534	8.984	5.736	26.529	1.00	26.85	A	O
ATOM	2800	N	ILE	535	11.152	6.062	26.053	1.00	24.74	A	N
ATOM	2801	CA	ILE	535	11.286	7.150	27.008	1.00	26.50	A	C
ATOM	2802	CB	ILE	535	12.732	7.293	27.524	1.00	25.91	A	C
ATOM	2803	CG2	ILE	535	12.873	8.544	28.384	1.00	25.86	A	C
ATOM	2804	CG1	ILE	535	13.097	6.072	28.375	1.00	29.65	A	C
ATOM	2805	CD1	ILE	535	14.571	6.022	28.751	1.00	34.01	A	C
ATOM	2806	C	ILE	535	10.824	8.425	26.301	1.00	27.89	A	C
ATOM	2807	O	ILE	535	11.327	8.783	25.234	1.00	22.21	A	O
ATOM	2808	N	ARG	536	9.825	9.070	26.893	1.00	28.53	A	N
ATOM	2809	CA	ARG	536	9.243	10.279	26.340	1.00	29.28	A	C
ATOM	2810	CB	ARG	536	7.961	10.623	27.092	1.00	31.79	A	C
ATOM	2811	CG	ARG	536	7.198	11.805	26.530	1.00	35.74	A	C
ATOM	2812	CD	ARG	536	5.823	11.895	27.163	1.00	41.31	A	C

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ATOM	2813	NE	ARG	536	5.080	13.059	26.688	1.00	45.92	A	N
ATOM	2814	CZ	ARG	536	4.786	14.113	27.442	1.00	50.08	A	C
ATOM	2815	NH1	ARG	536	5.167	14.154	28.715	1.00	50.54	A	N
ATOM	2816	NH2	ARG	536	4.123	15.135	26.916	1.00	51.13	A	N
ATOM	2817	C	ARG	536	10.165	11.484	26.330	1.00	30.22	A	C
ATOM	2818	O	ARG	536	10.781	11.829	27.341	1.00	31.11	A	O
ATOM	2819	N	TYR	537	10.292	12.094	25.162	1.00	28.52	A	N
ATOM	2820	CA	TYR	537	11.096	13.289	25.034	1.00	30.04	A	C
ATOM	2821	CB	TYR	537	12.059	13.183	23.857	1.00	29.99	A	C
ATOM	2822	CG	TYR	537	12.932	14.410	23.672	1.00	32.78	A	C
ATOM	2823	CD1	TYR	537	12.537	15.449	22.828	1.00	33.20	A	C
ATOM	2824	CE1	TYR	537	13.342	16.564	22.627	1.00	34.22	A	C
ATOM	2825	CD2	TYR	537	14.161	14.521	24.316	1.00	32.48	A	C
ATOM	2826	CE2	TYR	537	14.977	15.630	24.122	1.00	33.66	A	C
ATOM	2827	CZ	TYR	537	14.559	16.651	23.274	1.00	35.70	A	C
ATOM	2828	OH	TYR	537	15.348	17.760	23.073	1.00	35.96	A	O
ATOM	2829	C	TYR	537	10.137	14.460	24.824	1.00	29.41	A	C
ATOM	2830	O	TYR	537	9.402	14.494	23.842	1.00	27.00	A	O
ATOM	2831	N	TYR	538	10.104	15.370	25.791	1.00	31.50	A	N
ATOM	2832	CA	TYR	538	9.256	16.557	25.710	1.00	34.99	A	C
ATOM	2833	CB	TYR	538	8.127	16.539	26.747	1.00	38.27	A	C
ATOM	2834	CG	TYR	538	7.198	17.737	26.618	1.00	44.54	A	C
ATOM	2835	CD1	TYR	538	6.086	17.694	25.776	1.00	47.39	A	C
ATOM	2836	CE1	TYR	538	5.266	18.812	25.602	1.00	49.48	A	C
ATOM	2837	CD2	TYR	538	7.465	18.935	27.292	1.00	47.39	A	C
ATOM	2838	CE2	TYR	538	6.652	20.058	27.122	1.00	49.54	A	C
ATOM	2839	CZ	TYR	538	5.555	19.988	26.275	1.00	50.62	A	C
ATOM	2840	OH	TYR	538	4.753	21.095	26.092	1.00	53.25	A	O
ATOM	2841	C	TYR	538	10.134	17.763	25.951	1.00	35.18	A	C
ATOM	2842	O	TYR	538	10.810	17.856	26.980	1.00	37.79	A	O
ATOM	2843	N	ASN	539	10.122	18.693	25.008	1.00	34.97	A	N
ATOM	2844	CA	ASN	539	10.936	19.885	25.143	1.00	36.08	A	C
ATOM	2845	CB	ASN	539	12.393	19.560	24.781	1.00	36.82	A	C
ATOM	2846	CG	ASN	539	13.382	20.550	25.364	1.00	38.93	A	C
ATOM	2847	OD1	ASN	539	13.031	21.379	26.200	1.00	39.47	A	O
ATOM	2848	ND2	ASN	539	14.635	20.455	24.936	1.00	41.42	A	N
ATOM	2849	C	ASN	539	10.415	21.011	24.260	1.00	36.72	A	C
ATOM	2850	O	ASN	539	10.049	20.791	23.103	1.00	34.83	A	O
ATOM	2851	N	LYS	540	10.326	22.202	24.845	1.00	36.85	A	N
ATOM	2852	CA	LYS	540	9.891	23.396	24.133	1.00	39.51	A	C
ATOM	2853	CB	LYS	540	8.896	24.203	24.976	1.00	41.62	A	C
ATOM	2854	CG	LYS	540	7.593	23.475	25.276	1.00	45.38	A	C
ATOM	2855	CD	LYS	540	6.622	24.342	26.073	1.00	49.05	A	C
ATOM	2856	CE	LYS	540	7.201	24.771	27.421	1.00	51.96	A	C
ATOM	2857	NZ	LYS	540	7.387	23.640	28.377	1.00	54.10	A	N
ATOM	2858	C	LYS	540	11.176	24.186	23.939	1.00	39.09	A	C
ATOM	2859	O	LYS	540	11.723	24.733	24.895	1.00	39.72	A	O
ATOM	2860	N	VAL	541	11.683	24.218	22.714	1.00	39.75	A	N
ATOM	2861	CA	VAL	541	12.935	24.918	22.473	1.00	42.65	A	C
ATOM	2862	CB	VAL	541	14.066	23.923	22.079	1.00	43.68	A	C
ATOM	2863	CG1	VAL	541	13.673	23.127	20.858	1.00	44.36	A	C
ATOM	2864	CG2	VAL	541	15.370	24.660	21.838	1.00	42.67	A	C
ATOM	2865	C	VAL	541	12.908	26.070	21.481	1.00	43.10	A	C
ATOM	2866	O	VAL	541	12.425	25.930	20.358	1.00	43.16	A	O
ATOM	2867	N	PRO	542	13.377	27.250	21.920	1.00	44.42	A	N
ATOM	2868	CD	PRO	542	13.694	27.583	23.320	1.00	45.90	A	C
ATOM	2869	CA	PRO	542	13.430	28.449	21.079	1.00	45.42	A	C
ATOM	2870	CB	PRO	542	13.872	29.536	22.060	1.00	44.96	A	C
ATOM	2871	CG	PRO	542	13.348	29.046	23.376	1.00	46.97	A	C
ATOM	2872	C	PRO	542	14.527	28.177	20.060	1.00	45.64	A	C
ATOM	2873	O	PRO	542	15.627	27.763	20.426	1.00	45.34	A	O
ATOM	2874	N	VAL	543	14.221	28.365	18.786	1.00	46.09	A	N
ATOM	2875	CA	VAL	543	15.205	28.109	17.747	1.00	48.67	A	C
ATOM	2876	CB	VAL	543	14.732	28.979	16.819	1.00	48.54	A	C
ATOM	2877	CG1	VAL	543	14.468	25.719	17.635	1.00	46.89	A	C
ATOM	2878	CG2	VAL	543	13.481	27.403	16.059	1.00	45.56	A	C
ATOM	2879	C	VAL	543	15.485	29.355	16.924	1.00	51.82	A	C
ATOM	2880	O	VAL	543	14.857	30.398	17.128	1.00	52.16	A	O
ATOM	2881	N	GLU	544	16.447	29.249	16.008	1.00	53.40	A	N
ATOM	2882	CA	GLU	544	16.799	30.368	15.138	1.00	54.27	A	C
ATOM	2883	CB	GLU	544	18.051	30.034	14.327	1.00	56.79	A	C
ATOM	2884	CG	GLU	544	19.190	29.426	15.140	1.00	61.58	A	C
ATOM	2885	CD	GLU	544	19.782	30.386	16.156	1.00	65.07	A	C
ATOM	2886	OE1	GLU	544	20.811	31.024	15.841	1.00	66.77	A	O
ATOM	2887	OE2	GLU	544	19.228	30.491	17.272	1.00	66.51	A	O
ATOM	2888	C	GLU	544	15.615	30.589	14.201	1.00	54.13	A	C

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ATOM	2889	O	GLU	544	14.857	29.657	13.927	1.00	53.72	A	O
ATOM	2890	N	LYS	545	15.450	31.816	13.716	1.00	54.01	A	N
ATOM	2891	CA	LYS	545	14.340	32.135	12.822	1.00	52.72	A	C
ATOM	2892	CF	LYS	545	14.354	33.624	12.451	1.00	56.09	A	C
ATOM	2893	CC	LYS	545	13.144	34.065	11.630	1.00	58.83	A	C
ATOM	2894	CD	LYS	545	13.103	35.573	11.446	1.00	62.98	A	C
ATOM	2895	CE	LYS	545	11.828	36.005	10.730	1.00	64.14	A	C
ATOM	2896	NZ	LYS	545	11.648	37.487	10.742	1.00	66.42	A	N
ATOM	2897	C	LYS	545	14.310	31.274	11.555	1.00	50.44	A	C
ATOM	2898	O	LYS	545	13.268	30.705	11.215	1.00	47.74	A	O
ATOM	2899	N	ARG	546	15.451	31.166	10.875	1.00	48.37	A	N
ATOM	2900	CA	ARG	546	15.534	30.377	9.645	1.00	48.22	A	C
ATOM	2901	CB	ARG	546	16.907	30.527	8.983	1.00	51.55	A	C
ATOM	2902	CG	ARG	546	17.066	31.819	8.202	1.00	58.41	A	C
ATOM	2903	CD	ARG	546	16.114	31.869	7.007	1.00	61.78	A	C
ATOM	2904	NE	ARG	546	15.988	33.221	6.463	1.00	65.23	A	N
ATOM	2905	CZ	ARG	546	16.766	33.738	5.515	1.00	66.23	A	C
ATOM	2906	NH1	ARG	546	17.746	33.021	4.980	1.00	67.01	A	N
ATOM	2907	NH2	ARG	546	16.564	34.981	5.101	1.00	66.92	A	N
ATOM	2908	C	ARG	546	15.190	28.900	9.826	1.00	44.63	A	C
ATOM	2909	O	ARG	546	14.702	28.260	8.894	1.00	44.92	A	O
ATOM	2910	N	VAL	547	15.446	28.363	11.017	1.00	39.62	A	N
ATOM	2911	CA	VAL	547	15.127	26.966	11.297	1.00	36.55	A	C
ATOM	2912	CB	VAL	547	15.783	26.479	12.597	1.00	35.70	A	C
ATOM	2913	CG1	VAL	547	15.273	25.092	12.968	1.00	33.56	A	C
ATOM	2914	CG2	VAL	547	17.279	26.457	12.436	1.00	35.17	A	C
ATOM	2915	C	VAL	547	13.618	26.840	11.418	1.00	36.29	A	C
ATOM	2916	O	VAL	547	13.019	25.907	10.888	1.00	34.07	A	O
ATOM	2917	N	PHE	548	13.008	27.808	12.094	1.00	37.41	A	N
ATOM	2918	CA	PHE	548	11.565	27.822	12.274	1.00	38.84	A	C
ATOM	2919	CB	PHE	548	11.151	28.983	13.172	1.00	39.73	A	C
ATOM	2920	CG	PHE	548	9.747	28.878	13.677	1.00	41.26	A	C
ATOM	2921	CD1	PHE	548	9.483	28.267	14.895	1.00	41.67	A	C
ATOM	2922	CD2	PHE	548	8.683	29.387	12.934	1.00	42.50	A	C
ATOM	2923	CE1	PHE	548	8.181	28.162	15.369	1.00	43.00	A	C
ATOM	2924	CE2	PHE	548	7.376	29.288	13.397	1.00	41.99	A	C
ATOM	2925	CZ	PHE	548	7.124	28.674	14.617	1.00	43.52	A	C
ATOM	2926	C	PHE	548	10.870	27.924	10.922	1.00	38.67	A	C
ATOM	2927	O	PHE	548	9.898	27.217	10.671	1.00	40.40	A	O
ATOM	2928	N	LYS	549	11.380	28.789	10.049	1.00	40.15	A	N
ATOM	2929	CA	LYS	549	10.811	28.962	8.707	1.00	41.96	A	C
ATOM	2930	CB	LYS	549	11.478	30.139	7.983	1.00	45.33	A	C
ATOM	2931	CG	LYS	549	11.194	31.513	8.582	1.00	49.34	A	C
ATOM	2932	CD	LYS	549	9.767	31.961	8.292	1.00	54.68	A	C
ATOM	2933	CE	LYS	549	9.489	33.365	8.829	1.00	58.04	A	C
ATOM	2934	NZ	LYS	549	9.570	33.445	10.322	1.00	60.84	A	N
ATOM	2935	C	LYS	549	10.999	27.682	7.888	1.00	41.02	A	C
ATOM	2936	O	LYS	549	10.128	27.296	7.103	1.00	40.33	A	O
ATOM	2937	N	ASN	550	12.143	27.026	8.077	1.00	41.05	A	N
ATOM	2938	CA	ASN	550	12.437	25.783	7.364	1.00	40.25	A	C
ATOM	2939	CB	ASN	550	13.891	25.368	7.574	1.00	42.01	A	C
ATOM	2940	CG	ASN	550	14.847	26.146	6.697	1.00	45.19	A	C
ATOM	2941	OD1	ASN	550	14.529	26.471	5.553	1.00	46.35	A	O
ATOM	2942	ND2	ASN	550	16.027	26.448	7.228	1.00	46.19	A	N
ATOM	2943	C	ASN	550	11.507	24.664	7.799	1.00	37.19	A	C
ATOM	2944	O	ASN	550	10.995	23.923	6.965	1.00	36.03	A	O
ATOM	2945	N	LEU	551	11.267	24.572	9.103	1.00	37.03	A	N
ATOM	2946	CA	LEU	551	10.392	23.547	9.651	1.00	38.74	A	C
ATOM	2947	CB	LEU	551	10.429	23.569	11.180	1.00	37.42	A	C
ATOM	2948	CG	LEU	551	11.760	23.130	11.799	1.00	36.21	A	C
ATOM	2949	CD1	LEU	551	11.677	23.220	13.305	1.00	35.41	A	C
ATOM	2950	CD2	LEU	551	12.094	21.700	11.368	1.00	35.65	A	C
ATOM	2951	C	LEU	551	8.966	23.696	9.136	1.00	39.75	A	C
ATOM	2952	O	LEU	551	8.286	22.697	8.905	1.00	41.29	A	O
ATOM	2953	N	GLN	552	8.530	24.939	8.928	1.00	40.32	A	N
ATOM	2954	CA	GLN	552	7.188	25.212	8.405	1.00	41.34	A	C
ATOM	2955	CB	GLN	552	6.881	26.708	8.447	1.00	43.14	A	C
ATOM	2956	CG	GLN	552	6.800	27.287	9.836	1.00	45.64	A	C
ATOM	2957	CD	GLN	552	6.305	28.715	9.834	1.00	48.09	A	C
ATOM	2958	OE1	GLN	552	6.973	29.615	10.336	1.00	50.03	A	O
ATOM	2959	NE2	GLN	552	5.126	28.930	9.266	1.00	49.10	A	N
ATOM	2960	C	GLN	552	7.054	24.709	6.969	1.00	41.11	A	C
ATOM	2961	O	GLN	552	5.972	24.314	6.535	1.00	42.13	A	O
ATOM	2962	N	LEU	553	8.156	24.754	6.231	1.00	41.81	A	N
ATOM	2963	CA	LEU	553	8.186	24.278	4.853	1.00	43.90	A	C
ATOM	2964	CB	LEU	553	9.436	24.801	4.141	1.00	45.60	A	C

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ATOM	2965	CG	LEU	553	9.263	25.931	3.129	1.00	48.39	A	C
ATOM	2966	CD1	LEU	553	8.514	27.111	3.741	1.00	50.23	A	C
ATOM	2967	CD2	LEU	553	10.635	26.351	2.632	1.00	49.49	A	C
ATOM	2968	C	LEU	553	8.200	22.755	4.830	1.00	43.31	A	C
ATOM	2969	O	LEU	553	7.572	22.134	3.974	1.00	42.86	A	O
ATOM	2970	N	PHE	554	8.919	22.161	5.781	1.00	43.41	A	N
ATOM	2971	CA	PHE	554	9.027	20.705	5.874	1.00	43.35	A	C
ATOM	2972	CB	PHE	554	10.119	20.299	6.869	1.00	40.36	A	C
ATOM	2973	CG	PHE	554	11.479	20.843	6.542	1.00	38.43	A	C
ATOM	2974	CD1	PHE	554	11.772	21.329	5.268	1.00	37.29	A	C
ATOM	2975	CD2	PHE	554	12.467	20.893	7.522	1.00	36.23	A	C
ATOM	2976	CE1	PHE	554	13.024	21.858	4.981	1.00	34.97	A	C
ATOM	2977	CE2	PHE	554	13.717	21.418	7.245	1.00	35.51	A	C
ATOM	2978	CZ	PHE	554	13.998	21.905	5.969	1.00	36.89	A	C
ATOM	2979	C	PHE	554	7.721	20.049	6.289	1.00	44.43	A	C
ATOM	2980	O	PHE	554	7.562	18.844	6.141	1.00	44.38	A	O
ATOM	2981	N	MET	555	6.799	20.844	6.824	1.00	46.80	A	N
ATOM	2982	CA	MET	555	5.508	20.333	7.271	1.00	50.02	A	C
ATOM	2983	CB	MET	555	5.217	20.824	8.692	1.00	52.08	A	C
ATOM	2984	CG	MET	555	6.165	20.262	9.746	1.00	54.07	A	C
ATOM	2985	SD	MET	555	6.060	21.107	11.344	1.00	57.41	A	S
ATOM	2986	CE	MET	555	4.650	20.284	12.096	1.00	56.69	A	C
ATOM	2987	C	MET	555	4.363	20.711	6.334	1.00	51.79	A	C
ATOM	2988	O	MET	555	3.198	20.443	6.628	1.00	51.53	A	O
ATOM	2989	N	GLU	556	4.705	21.347	5.217	1.00	54.67	A	N
ATOM	2990	CA	GLU	556	3.726	21.764	4.214	1.00	57.21	A	C
ATOM	2991	CB	GLU	556	4.345	22.835	3.301	1.00	60.94	A	C
ATOM	2992	CG	GLU	556	3.636	23.078	1.965	1.00	65.88	A	C
ATOM	2993	CD	GLU	556	2.224	23.625	2.112	1.00	69.85	A	C
ATOM	2994	OE1	GLU	556	2.063	24.731	2.676	1.00	70.79	A	O
ATOM	2995	OE2	GLU	556	1.276	22.951	1.646	1.00	70.32	A	O
ATOM	2996	C	GLU	556	3.263	20.560	3.395	1.00	57.07	A	C
ATOM	2997	O	GLU	556	4.067	19.693	3.050	1.00	57.68	A	O
ATOM	2998	N	ASN	557	1.962	20.515	3.109	1.00	57.02	A	N
ATOM	2999	CA	ASN	557	1.317	19.447	2.332	1.00	56.60	A	C
ATOM	3000	CB	ASN	557	1.624	19.579	0.820	1.00	58.83	A	C
ATOM	3001	CG	ASN	557	3.111	19.417	0.483	1.00	60.68	A	C
ATOM	3002	OD1	ASN	557	3.785	20.384	0.119	1.00	61.00	A	O
ATOM	3003	ND2	ASN	557	3.620	18.191	0.591	1.00	61.71	A	N
ATOM	3004	C	ASN	557	1.572	18.020	2.820	1.00	55.69	A	C
ATOM	3005	O	ASN	557	1.677	17.086	2.017	1.00	54.81	A	O
ATOM	3006	N	LYS	558	1.618	17.842	4.137	1.00	53.29	A	N
ATOM	3007	CA	LYS	558	1.871	16.522	4.700	1.00	52.59	A	C
ATOM	3008	CB	LYS	558	3.271	16.466	5.314	1.00	50.01	A	C
ATOM	3009	CG	LYS	558	4.395	16.396	4.293	1.00	50.35	A	C
ATOM	3010	CD	LYS	558	5.754	16.450	4.969	1.00	47.14	A	C
ATOM	3011	CE	LYS	558	6.873	16.309	3.960	1.00	44.62	A	C
ATOM	3012	NZ	LYS	558	8.201	16.507	4.603	1.00	44.94	A	N
ATOM	3013	C	LYS	558	0.856	16.041	5.724	1.00	52.73	A	C
ATOM	3014	O	LYS	558	0.171	16.834	6.370	1.00	53.86	A	O
ATOM	3015	N	GLN	559	0.755	14.722	5.832	1.00	53.56	A	N
ATOM	3016	CA	GLN	559	-0.130	14.069	6.786	1.00	55.56	A	C
ATOM	3017	CB	GLN	559	-0.585	12.716	6.237	1.00	57.54	A	C
ATOM	3018	CG	GLN	559	-1.644	12.806	5.153	1.00	59.31	A	C
ATOM	3019	CD	GLN	559	-2.940	13.403	5.668	1.00	59.22	A	C
ATOM	3020	OE1	GLN	559	-3.632	12.799	6.493	1.00	59.74	A	O
ATOM	3021	NE2	GLN	559	-3.267	14.599	5.194	1.00	58.39	A	N
ATOM	3022	C	GLN	559	0.660	13.861	8.081	1.00	55.51	A	C
ATOM	3023	O	GLN	559	1.885	13.726	8.052	1.00	55.02	A	O
ATOM	3024	N	PRO	560	-0.029	13.837	9.231	1.00	54.97	A	N
ATOM	3025	CD	PRO	560	-1.477	14.053	9.401	1.00	55.24	A	C
ATOM	3026	CA	PRO	560	0.623	13.646	10.532	1.00	55.00	A	C
ATOM	3027	CB	PRO	560	-0.564	13.521	11.484	1.00	55.62	A	C
ATOM	3028	CG	PRO	560	-1.572	14.433	10.856	1.00	55.41	A	C
ATOM	3029	C	PRO	560	1.545	12.422	10.621	1.00	54.24	A	C
ATOM	3030	O	PRO	560	2.529	12.441	11.364	1.00	52.86	A	O
ATOM	3031	N	GLU	561	1.254	11.382	9.842	1.00	52.99	A	N
ATOM	3032	CA	GLU	561	2.065	10.166	9.870	1.00	53.85	A	C
ATOM	3033	CB	GLU	561	1.237	8.928	9.500	1.00	56.69	A	C
ATOM	3034	CG	GLU	561	-0.271	9.049	9.696	1.00	60.31	A	C
ATOM	3035	CD	GLU	561	-1.009	9.321	8.389	1.00	62.25	A	C
ATOM	3036	OE1	GLU	561	-1.663	10.382	8.283	1.00	63.49	A	O
ATOM	3037	OE2	GLU	561	-0.934	8.473	7.469	1.00	61.26	A	O
ATOM	3038	C	GLU	561	3.299	10.225	8.974	1.00	52.00	A	C
ATOM	3039	O	GLU	561	4.173	9.364	9.062	1.00	51.16	A	O
ATOM	3040	N	ASP	562	3.369	11.232	8.111	1.00	50.81	A	N



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ATOM	3041	CA	ASP	562	4.501	11.381	7.200	1.00	50.29	A	C
ATOM	3042	CB	ASP	562	4.115	12.264	6.009	1.00	54.54	A	C
ATOM	3043	CG	ASP	562	3.277	11.521	4.968	1.00	59.56	A	C
ATOM	3044	OD1	ASP	562	2.519	10.595	5.343	1.00	61.19	A	O
ATOM	3045	OD2	ASP	562	3.378	11.866	3.767	1.00	62.66	A	O
ATOM	3046	C	ASP	562	5.765	11.916	7.865	1.00	47.29	A	C
ATOM	3047	O	ASP	562	5.708	12.615	8.881	1.00	45.06	A	O
ATOM	3048	N	ASP	563	6.911	11.583	7.281	1.00	44.98	A	N
ATOM	3049	CA	ASP	563	8.189	12.031	7.815	1.00	44.09	A	C
ATOM	3050	CB	ASP	563	9.348	11.247	7.184	1.00	48.46	A	C
ATOM	3051	CG	ASP	563	9.627	9.924	7.898	1.00	54.22	A	C
ATOM	3052	OD1	ASP	563	10.082	8.966	7.231	1.00	56.23	A	O
ATOM	3053	OD2	ASP	563	9.409	9.842	9.131	1.00	55.66	A	O
ATOM	3054	C	ASP	563	8.423	13.531	7.663	1.00	41.74	A	C
ATOM	3055	O	ASP	563	8.059	14.136	6.652	1.00	37.62	A	O
ATOM	3056	N	LEU	564	9.000	14.124	8.704	1.00	39.43	A	N
ATOM	3057	CA	LEU	564	9.313	15.545	8.720	1.00	39.51	A	C
ATOM	3058	CB	LEU	564	9.768	15.967	10.120	1.00	38.82	A	C
ATOM	3059	CG	LEU	564	10.243	17.411	10.306	1.00	40.37	A	C
ATOM	3060	CD1	LEU	564	9.081	18.375	10.201	1.00	40.02	A	C
ATOM	3061	CD2	LEU	564	10.898	17.550	11.657	1.00	43.87	A	C
ATOM	3062	C	LEU	564	10.434	15.785	7.717	1.00	38.66	A	C
ATOM	3063	O	LEU	564	10.386	16.720	6.925	1.00	39.43	A	O
ATOM	3064	N	PHE	565	11.419	14.895	7.738	1.00	37.68	A	N
ATOM	3065	CA	PHE	565	12.562	14.983	6.850	1.00	36.13	A	C
ATOM	3066	CB	PHE	565	13.863	14.807	7.634	1.00	32.68	A	C
ATOM	3067	CG	PHE	565	14.052	15.805	8.735	1.00	30.92	A	C
ATOM	3068	CD1	PHE	565	14.223	17.153	8.449	1.00	29.03	A	C
ATOM	3069	CD2	PHE	565	14.074	15.391	10.064	1.00	31.01	A	C
ATOM	3070	CE1	PHE	565	14.414	18.080	9.472	1.00	28.00	A	C
ATOM	3071	CE2	PHE	565	14.264	16.306	11.094	1.00	30.28	A	C
ATOM	3072	CZ	PHE	565	14.435	17.658	10.796	1.00	31.83	A	C
ATOM	3073	C	PHE	565	12.516	13.958	5.728	1.00	38.88	A	C
ATOM	3074	O	PHE	565	13.242	12.959	5.759	1.00	37.67	A	O
ATOM	3075	N	ASP	566	11.627	14.171	4.762	1.00	41.09	A	N
ATOM	3076	CA	ASP	566	11.550	13.282	3.604	1.00	46.02	A	C
ATOM	3077	CB	ASP	566	10.310	13.610	2.765	1.00	48.88	A	C
ATOM	3078	CG	ASP	566	10.345	15.019	2.191	1.00	52.84	A	C
ATOM	3079	OD1	ASP	566	10.367	15.991	2.980	1.00	53.71	A	O
ATOM	3080	OD2	ASP	566	10.356	15.152	0.947	1.00	56.77	A	O
ATOM	3081	C	ASP	566	12.839	13.599	2.828	1.00	47.76	A	C
ATOM	3082	O	ASP	566	13.371	14.690	2.968	1.00	49.04	A	O
ATOM	3083	N	ARG	567	13.345	12.680	2.016	1.00	48.95	A	N
ATOM	3084	CA	ARG	567	14.601	12.929	1.284	1.00	51.51	A	C
ATOM	3085	CB	ARG	567	14.605	14.292	0.565	1.00	54.03	A	C
ATOM	3086	CG	ARG	567	13.491	14.546	-0.433	1.00	58.82	A	C
ATOM	3087	CD	ARG	567	13.714	15.900	-1.075	1.00	61.90	A	C
ATOM	3088	NE	ARG	567	12.493	16.479	-1.624	1.00	65.50	A	N
ATOM	3089	CZ	ARG	567	12.467	17.532	-2.438	1.00	66.51	A	C
ATOM	3090	NH1	ARG	567	13.597	18.123	-2.807	1.00	67.26	A	N
ATOM	3091	NH2	ARG	567	11.306	18.008	-2.868	1.00	67.50	A	N
ATOM	3092	C	ARG	567	15.803	12.905	2.237	1.00	49.67	A	C
ATOM	3093	O	ARG	567	16.884	13.389	1.897	1.00	50.14	A	O
ATOM	3094	N	LEU	568	15.611	12.374	3.438	1.00	47.44	A	N
ATOM	3095	CA	LEU	568	16.700	12.301	4.403	1.00	45.48	A	C
ATOM	3096	CB	LEU	568	16.704	13.543	5.301	1.00	46.47	A	C
ATOM	3097	CG	LEU	568	17.798	13.591	6.371	1.00	46.82	A	C
ATOM	3098	CD1	LEU	568	19.173	13.575	5.716	1.00	47.79	A	C
ATOM	3099	CD2	LEU	568	17.629	14.835	7.234	1.00	48.66	A	C
ATOM	3100	C	LEU	568	16.658	11.046	5.271	1.00	41.82	A	C
ATOM	3101	O	LEU	568	15.599	10.632	5.737	1.00	40.76	A	O
ATOM	3102	N	ASN	569	17.822	10.428	5.446	1.00	39.22	A	N
ATOM	3103	CA	ASN	569	17.951	9.244	6.286	1.00	37.54	A	C
ATOM	3104	CB	ASN	569	17.721	7.938	5.493	1.00	38.73	A	C
ATOM	3105	CG	ASN	569	18.746	7.703	4.383	1.00	40.75	A	C
ATOM	3106	OD1	ASN	569	18.472	6.979	3.428	1.00	44.85	A	O
ATOM	3107	ND2	ASN	569	19.929	8.280	4.515	1.00	41.04	A	N
ATOM	3108	C	ASN	569	19.312	9.261	6.972	1.00	35.88	A	C
ATOM	3109	O	ASN	569	20.171	10.080	6.640	1.00	35.07	A	O
ATOM	3110	N	THR	570	19.509	8.356	7.922	1.00	32.03	A	N
ATOM	3111	CA	THR	570	20.767	8.285	8.645	1.00	29.48	A	C
ATOM	3112	CB	THR	570	20.712	7.218	9.766	1.00	31.14	A	C
ATOM	3113	OG1	THR	570	20.407	5.932	9.206	1.00	30.33	A	O
ATOM	3114	CG2	THR	570	19.634	7.589	10.773	1.00	28.81	A	C
ATOM	3115	C	THR	570	21.958	8.042	7.718	1.00	26.22	A	C
ATOM	3116	O	THR	570	23.027	8.605	7.924	1.00	25.01	A	O

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ATOM	3117	N	GLY	571	21.767	7.207	6.700	1.00	24.38	A	N
ATOM	3118	CA	GLY	571	22.830	6.940	5.744	1.00	26.00	A	C
ATOM	3119	C	GLY	571	23.334	8.203	5.043	1.00	26.64	A	C
ATOM	3120	O	GLY	571	24.537	8.426	4.844	1.00	25.70	A	O
ATOM	3121	N	ILE	572	22.413	9.044	4.581	1.00	27.88	A	N
ATOM	3122	CA	ILE	572	22.766	10.287	3.900	1.00	28.78	A	C
ATOM	3123	CB	ILE	572	21.531	10.957	3.264	1.00	31.65	A	C
ATOM	3124	CG2	ILE	572	21.917	12.296	2.642	1.00	33.10	A	C
ATOM	3125	CG1	ILE	572	20.931	10.041	2.194	1.00	32.91	A	C
ATOM	3126	CD1	ILE	572	19.613	10.542	1.621	1.00	35.72	A	C
ATOM	3127	C	ILE	572	23.418	11.269	4.862	1.00	27.75	A	C
ATOM	3128	O	ILE	572	24.418	11.897	4.534	1.00	28.92	A	O
ATOM	3129	N	LEU	573	22.870	11.374	6.066	1.00	26.29	A	N
ATOM	3130	CA	LEU	573	23.418	12.286	7.058	1.00	27.30	A	C
ATOM	3131	CB	LEU	573	22.509	12.321	8.284	1.00	27.60	A	C
ATOM	3132	CG	LEU	573	22.843	13.328	9.385	1.00	33.41	A	C
ATOM	3133	CD1	LEU	573	22.934	14.743	8.814	1.00	34.60	A	C
ATOM	3134	CD2	LEU	573	21.767	13.250	10.443	1.00	32.66	A	C
ATOM	3135	C	LEU	573	24.854	11.914	7.448	1.00	27.68	A	C
ATOM	3136	O	LEU	573	25.742	12.777	7.481	1.00	26.12	A	O
ATOM	3137	N	ASN	574	25.078	10.629	7.721	1.00	25.40	A	N
ATOM	3138	CA	ASN	574	26.398	10.142	8.113	1.00	25.40	A	C
ATOM	3139	CB	ASN	574	26.300	8.725	8.690	1.00	21.51	A	C
ATOM	3140	CG	ASN	574	25.787	8.712	10.138	1.00	26.31	A	C
ATOM	3141	OD1	ASN	574	26.046	9.642	10.909	1.00	24.41	A	O
ATOM	3142	ND2	ASN	574	25.059	7.659	10.506	1.00	17.56	A	N
ATOM	3143	C	ASN	574	27.408	10.199	6.965	1.00	28.84	A	C
ATOM	3144	O	ASN	574	28.611	10.378	7.192	1.00	25.53	A	O
ATOM	3145	N	LYS	575	26.912	10.046	5.739	1.00	29.53	A	N
ATOM	3146	CA	LYS	575	27.755	10.105	4.550	1.00	34.81	A	C
ATOM	3147	CB	LYS	575	26.915	9.808	3.307	1.00	38.68	A	C
ATOM	3148	CG	LYS	575	27.713	9.542	2.042	1.00	45.85	A	C
ATOM	3149	CD	LYS	575	28.389	8.179	2.089	1.00	51.16	A	C
ATOM	3150	CE	LYS	575	29.213	7.920	0.828	1.00	54.92	A	C
ATOM	3151	NZ	LYS	575	30.326	8.904	0.651	1.00	55.08	A	N
ATOM	3152	C	LYS	575	28.330	11.529	4.477	1.00	34.47	A	C
ATOM	3153	O	LYS	575	29.515	11.722	4.198	1.00	33.73	A	O
ATOM	3154	N	HIS	576	27.480	12.509	4.776	1.00	34.85	A	N
ATOM	3155	CA	HIS	576	27.865	13.917	4.779	1.00	35.68	A	C
ATOM	3156	CB	HIS	576	26.623	14.803	4.918	1.00	37.37	A	C
ATOM	3157	CG	HIS	576	26.926	16.269	4.988	1.00	41.57	A	C
ATOM	3158	CD2	HIS	576	27.673	17.065	4.186	1.00	43.16	A	C
ATOM	3159	ND1	HIS	576	26.428	17.086	5.981	1.00	43.62	A	N
ATOM	3160	CE1	HIS	576	26.855	18.321	5.788	1.00	43.45	A	C
ATOM	3161	NE2	HIS	576	27.612	18.336	4.706	1.00	43.74	A	N
ATOM	3162	C	HIS	576	28.837	14.207	5.924	1.00	35.06	A	C
ATOM	3163	O	HIS	576	29.851	14.878	5.728	1.00	34.71	A	O
ATOM	3164	N	LEU	577	28.526	13.699	7.115	1.00	33.29	A	N
ATOM	3165	CA	LEU	577	29.379	13.910	8.282	1.00	32.40	A	C
ATOM	3166	CB	LEU	577	28.755	13.270	9.520	1.00	31.99	A	C
ATOM	3167	CG	LEU	577	27.479	13.924	10.051	1.00	32.32	A	C
ATOM	3168	CD1	LEU	577	26.909	13.088	11.194	1.00	29.58	A	C
ATOM	3169	CD2	LEU	577	27.787	15.345	10.528	1.00	29.14	A	C
ATOM	3170	C	LEU	577	30.775	13.351	8.044	1.00	30.89	A	C
ATOM	3171	O	LEU	577	31.767	13.926	8.489	1.00	28.24	A	O
ATOM	3172	N	GLN	578	30.833	12.244	7.310	1.00	31.71	A	N
ATOM	3173	CA	GLN	578	32.084	11.583	6.964	1.00	36.17	A	C
ATOM	3174	CB	GLN	578	31.788	10.247	6.273	1.00	37.27	A	C
ATOM	3175	CG	GLN	578	33.006	9.415	5.915	1.00	41.30	A	C
ATOM	3176	CD	GLN	578	33.832	9.005	7.128	1.00	44.94	A	C
ATOM	3177	OE1	GLN	578	33.294	8.696	8.197	1.00	47.10	A	O
ATOM	3178	NE2	GLN	578	35.148	8.993	6.961	1.00	45.17	A	N
ATOM	3179	C	GLN	578	32.926	12.486	6.054	1.00	38.63	A	C
ATOM	3180	O	GLN	578	34.154	12.397	6.049	1.00	39.92	A	O
ATOM	3181	N	ASP	579	32.260	13.358	5.296	1.00	40.66	A	N
ATOM	3182	CA	ASP	579	32.950	14.290	4.403	1.00	44.30	A	C
ATOM	3183	CB	ASP	579	31.973	14.935	3.403	1.00	47.22	A	C
ATOM	3184	CG	ASP	579	31.316	13.923	2.461	1.00	50.23	A	C
ATOM	3185	OD1	ASP	579	31.779	12.760	2.381	1.00	51.81	A	O
ATOM	3186	OD2	ASP	579	30.327	14.305	1.793	1.00	48.59	A	O
ATOM	3187	C	ASP	579	33.605	15.393	5.232	1.00	44.08	A	C
ATOM	3188	O	ASP	579	34.754	15.765	4.994	1.00	45.08	A	O
ATOM	3189	N	LEU	580	32.860	15.899	6.210	1.00	42.37	A	N
ATOM	3190	CA	LEU	580	33.331	16.964	7.088	1.00	42.50	A	C
ATOM	3191	CB	LEU	580	32.206	17.407	8.030	1.00	41.66	A	C
ATOM	3192	CG	LEU	580	30.913	17.865	7.352	1.00	43.16	A	C

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ATOM	3193	CD1	LEU	580	29.845	18.145	8.398	1.00	41.94	A	C
ATOM	3194	CD2	LEU	580	31.180	19.101	6.499	1.00	41.09	A	C
ATOM	3195	C	LEU	580	34.541	16.551	7.911	1.00	42.56	A	C
ATOM	3196	O	LEU	580	35.540	17.261	7.952	1.00	44.50	A	O
ATOM	3197	N	MET	581	34.457	15.389	8.551	1.00	41.15	A	N
ATOM	3198	CA	MET	581	35.550	14.902	9.381	1.00	40.01	A	C
ATOM	3199	CB	MET	581	35.341	15.358	10.825	1.00	39.42	A	C
ATOM	3200	CG	MET	581	36.491	15.040	11.756	1.00	41.60	A	C
ATOM	3201	SD	MET	581	36.050	15.306	13.479	1.00	38.95	A	S
ATOM	3202	OE	MET	581	35.688	13.608	13.983	1.00	40.86	A	C
ATOM	3203	C	MET	581	35.626	13.382	9.307	1.00	39.32	A	C
ATOM	3204	O	MET	581	34.607	12.693	9.419	1.00	38.11	A	O
ATOM	3205	N	GLU	582	36.832	12.861	9.107	1.00	39.66	A	N
ATOM	3206	CA	GLU	582	37.020	11.416	9.005	1.00	41.50	A	C
ATOM	3207	CB	GLU	582	38.479	11.079	8.687	1.00	46.59	A	C
ATOM	3208	CG	GLU	582	39.013	11.726	7.413	1.00	53.43	A	C
ATOM	3209	CD	GLU	582	39.980	12.865	7.699	1.00	57.26	A	C
ATOM	3210	OE1	GLU	582	39.515	13.999	7.972	1.00	58.37	A	O
ATOM	3211	OE2	GLU	582	41.207	12.616	7.658	1.00	57.49	A	O
ATOM	3212	C	GLU	582	36.595	10.703	10.284	1.00	38.59	A	C
ATOM	3213	O	GLU	582	37.018	11.069	11.380	1.00	40.92	A	O
ATOM	3214	N	GLY	583	35.730	9.707	10.144	1.00	35.03	A	N
ATOM	3215	CA	GLY	583	35.271	8.969	11.304	1.00	31.22	A	C
ATOM	3216	C	GLY	583	34.121	9.602	12.064	1.00	28.70	A	C
ATOM	3217	O	GLY	583	33.645	9.037	13.040	1.00	31.09	A	O
ATOM	3218	N	LEU	584	33.666	10.770	11.631	1.00	26.60	A	N
ATOM	3219	CA	LEU	584	32.563	11.442	12.301	1.00	24.90	A	C
ATOM	3220	CB	LEU	584	32.584	12.938	11.976	1.00	23.96	A	C
ATOM	3221	CG	LEU	584	31.436	13.777	12.541	1.00	25.31	A	C
ATOM	3222	CD1	LEU	584	31.590	13.891	14.047	1.00	26.63	A	C
ATOM	3223	CD2	LEU	584	31.428	15.162	11.906	1.00	25.65	A	C
ATOM	3224	C	LEU	584	31.207	10.847	11.905	1.00	24.03	A	C
ATOM	3225	O	LEU	584	30.944	10.614	10.721	1.00	25.45	A	O
ATOM	3226	N	THR	585	30.373	10.573	12.904	1.00	22.62	A	N
ATOM	3227	CA	THR	585	29.019	10.039	12.693	1.00	23.96	A	C
ATOM	3228	CB	THR	585	28.911	8.506	12.962	1.00	25.32	A	C
ATOM	3229	OG1	THR	585	29.102	8.238	14.360	1.00	26.10	A	O
ATOM	3230	CG2	THR	585	29.928	7.733	12.146	1.00	26.71	A	C
ATOM	3231	C	THR	585	28.057	10.768	13.635	1.00	21.92	A	C
ATOM	3232	O	THR	585	28.487	11.496	14.525	1.00	21.48	A	O
ATOM	3233	N	ALA	586	26.762	10.535	13.473	1.00	21.21	A	N
ATOM	3234	CA	ALA	586	25.756	11.198	14.296	1.00	21.71	A	C
ATOM	3235	CB	ALA	586	24.374	10.711	13.908	1.00	24.33	A	C
ATOM	3236	C	ALA	586	25.942	11.096	15.812	1.00	21.36	A	C
ATOM	3237	O	ALA	586	25.844	12.101	16.518	1.00	22.63	A	O
ATOM	3238	N	LYS	587	26.207	9.893	16.317	1.00	20.23	A	N
ATOM	3239	CA	LYS	587	26.372	9.705	17.758	1.00	20.36	A	C
ATOM	3240	CB	LYS	587	26.291	8.223	18.143	1.00	18.58	A	C
ATOM	3241	CG	LYS	587	27.457	7.368	17.709	1.00	19.57	A	C
ATOM	3242	CD	LYS	587	27.209	5.914	18.127	1.00	27.04	A	C
ATOM	3243	CE	LYS	587	28.495	5.114	18.185	1.00	23.93	A	C
ATOM	3244	NZ	LYS	587	29.393	5.618	19.254	1.00	22.88	A	N
ATOM	3245	C	LYS	587	27.616	10.337	18.378	1.00	20.25	A	C
ATOM	3246	O	LYS	587	27.667	10.518	19.593	1.00	21.48	A	O
ATOM	3247	N	VAL	588	28.624	10.647	17.563	1.00	19.80	A	N
ATOM	3248	CA	VAL	588	29.843	11.272	18.081	1.00	19.27	A	C
ATOM	3249	CB	VAL	588	30.879	11.542	16.959	1.00	22.64	A	C
ATOM	3250	CG1	VAL	588	32.115	12.205	17.534	1.00	19.50	A	C
ATOM	3251	CG2	VAL	588	31.263	10.240	16.258	1.00	24.98	A	C
ATOM	3252	C	VAL	588	29.457	12.598	18.750	1.00	20.50	A	C
ATOM	3253	O	VAL	588	30.051	12.991	19.757	1.00	22.93	A	O
ATOM	3254	N	PHE	589	28.415	13.243	18.227	1.00	17.48	A	N
ATOM	3255	CA	PHE	589	27.934	14.507	18.779	1.00	18.01	A	C
ATOM	3256	CB	PHE	589	26.833	15.110	17.908	1.00	17.50	A	C
ATOM	3257	CG	PHE	589	27.353	15.821	16.707	1.00	22.00	A	C
ATOM	3258	CD1	PHE	589	27.472	15.163	15.485	1.00	23.21	A	C
ATOM	3259	CD2	PHE	589	27.773	17.145	16.800	1.00	24.22	A	C
ATOM	3260	CE1	PHE	589	28.003	15.808	14.381	1.00	22.57	A	C
ATOM	3261	CE2	PHE	589	28.303	17.798	15.701	1.00	24.62	A	C
ATOM	3262	CZ	PHE	589	28.420	17.127	14.488	1.00	24.21	A	C
ATOM	3263	C	PHE	589	27.442	14.354	20.208	1.00	19.30	A	C
ATOM	3264	O	PHE	589	27.643	15.252	21.034	1.00	18.98	A	O
ATOM	3265	N	ARG	590	26.790	13.227	20.490	1.00	16.72	A	N
ATOM	3266	CA	ARG	590	26.292	12.949	21.825	1.00	19.21	A	C
ATOM	3267	CB	ARG	590	25.441	11.678	21.850	1.00	23.69	A	C
ATOM	3268	CG	ARG	590	24.111	11.807	21.152	1.00	26.29	A	C

ATOM	3269	CD	ARG	590	23.204	10.640	21.508	1.00	30.86	A	C
ATOM	3270	NE	ARG	590	21.898	11.110	21.963	1.00	37.53	A	N
ATOM	3271	CZ	ARG	590	21.360	10.817	23.144	1.00	39.43	A	C
ATOM	3272	NH1	ARG	590	22.011	10.046	24.005	1.00	39.60	A	N
ATOM	3273	NH2	ARG	590	20.167	11.298	23.463	1.00	41.15	A	V
ATOM	3274	C	ARG	590	27.458	12.792	22.796	1.00	19.31	A	C
ATOM	3275	O	ARG	590	27.415	13.312	23.914	1.00	18.25	A	O
ATOM	3276	N	THR	591	28.499	12.091	22.353	1.00	17.73	A	N
ATOM	3277	CA	THR	591	29.685	11.865	23.177	1.00	17.79	A	C
ATOM	3278	CB	THR	591	30.660	10.905	22.484	1.00	20.00	A	C
ATOM	3279	OG1	THR	591	29.959	9.721	22.075	1.00	24.64	A	O
ATOM	3280	CG2	THR	591	31.794	10.547	23.432	1.00	15.63	A	C
ATOM	3281	C	THR	591	30.412	13.189	23.418	1.00	18.25	A	C
ATOM	3282	O	THR	591	30.832	13.489	24.541	1.00	17.31	A	O
ATOM	3283	N	TYR	592	30.560	13.963	22.350	1.00	14.95	A	N
ATOM	3284	CA	TYR	592	31.210	15.260	22.428	1.00	20.36	A	C
ATOM	3285	CB	TYR	592	31.328	15.885	21.036	1.00	21.33	A	C
ATOM	3286	CG	TYR	592	31.693	17.351	21.079	1.00	25.73	A	C
ATOM	3287	CD1	TYR	592	32.982	17.757	21.424	1.00	26.54	A	C
ATOM	3288	CE1	TYR	592	33.304	19.112	21.538	1.00	30.63	A	C
ATOM	3289	CD2	TYR	592	30.733	18.334	20.844	1.00	23.85	A	C
ATOM	3290	CE2	TYR	592	31.045	19.690	20.962	1.00	28.77	A	C
ATOM	3291	CZ	TYR	592	32.333	20.067	21.308	1.00	27.05	A	C
ATOM	3292	OH	TYR	592	32.648	21.396	21.429	1.00	33.19	A	O
ATOM	3293	C	TYR	592	30.455	16.212	23.352	1.00	20.37	A	C
ATOM	3294	O	TYR	592	31.030	16.746	24.298	1.00	18.86	A	O
ATOM	3295	N	ASN	593	29.168	16.422	23.075	1.00	23.18	A	N
ATOM	3296	CA	ASN	593	28.359	17.320	23.888	1.00	23.86	A	C
ATOM	3297	CB	ASN	593	26.958	17.515	23.294	1.00	28.78	A	C
ATOM	3298	CG	ASN	593	26.977	18.273	21.948	1.00	32.82	A	C
ATOM	3299	OD1	ASN	593	26.310	17.878	20.990	1.00	34.75	A	O
ATOM	3300	ND2	ASN	593	27.738	19.358	21.884	1.00	32.03	A	N
ATOM	3301	C	ASN	593	28.288	16.863	25.341	1.00	23.89	A	C
ATOM	3302	O	ASN	593	28.363	17.685	26.242	1.00	25.84	A	O
ATOM	3303	N	ALA	594	28.193	15.557	25.583	1.00	20.38	A	N
ATOM	3304	CA	ALA	594	28.135	15.071	26.961	1.00	18.29	A	C
ATOM	3305	CB	ALA	594	27.801	13.589	27.000	1.00	19.10	A	C
ATOM	3306	C	ALA	594	29.468	15.342	27.665	1.00	18.88	A	C
ATOM	3307	O	ALA	594	29.497	15.979	28.720	1.00	17.29	A	O
ATOM	3308	N	SER	595	30.568	14.922	27.039	1.00	19.10	A	N
ATOM	3309	CA	SER	595	31.908	15.121	27.604	1.00	22.66	A	C
ATOM	3310	CB	SER	595	32.962	14.391	26.766	1.00	21.82	A	C
ATOM	3311	OG	SER	595	32.828	12.985	26.937	1.00	23.93	A	O
ATOM	3312	C	SER	595	32.320	16.583	27.842	1.00	22.15	A	C
ATOM	3313	O	SER	595	32.828	16.917	28.919	1.00	19.20	A	O
ATOM	3314	N	ILE	596	32.054	17.454	26.868	1.00	23.42	A	N
ATOM	3315	CA	ILE	596	32.397	18.871	27.000	1.00	25.19	A	C
ATOM	3316	CB	ILE	596	32.241	19.640	25.662	1.00	29.00	A	C
ATOM	3317	CG2	ILE	596	30.771	19.862	25.315	1.00	32.48	A	C
ATOM	3318	CG1	ILE	596	32.946	20.992	25.752	1.00	33.18	A	C
ATOM	3319	CD1	ILE	596	34.433	20.882	26.018	1.00	38.92	A	C
ATOM	3320	C	ILE	596	31.565	19.529	28.104	1.00	24.90	A	C
ATOM	3321	O	ILE	596	32.066	20.368	28.843	1.00	25.70	A	O
ATOM	3322	N	THR	597	30.313	19.102	28.246	1.00	24.05	A	N
ATOM	3323	CA	THR	597	29.435	19.632	29.283	1.00	25.17	A	C
ATOM	3324	CB	THR	597	27.978	19.128	29.097	1.00	27.94	A	C
ATOM	3325	OG1	THR	597	27.439	19.661	27.880	1.00	27.57	A	O
ATOM	3326	CG2	THR	597	27.101	19.543	30.275	1.00	25.58	A	C
ATOM	3327	C	THR	597	29.946	19.236	30.676	1.00	24.40	A	C
ATOM	3328	O	THR	597	29.972	20.061	31.578	1.00	26.29	A	O
ATOM	3329	N	LEU	598	30.348	17.977	30.852	1.00	23.80	A	N
ATOM	3330	CA	LEU	598	30.862	17.526	32.149	1.00	22.40	A	C
ATOM	3331	CB	LEU	598	31.200	16.027	32.135	1.00	20.12	A	C
ATOM	3332	CG	LEU	598	31.789	15.460	33.432	1.00	18.94	A	C
ATOM	3333	CD1	LEU	598	30.741	15.452	34.534	1.00	20.08	A	C
ATOM	3334	CD2	LEU	598	32.308	14.041	33.210	1.00	21.36	A	C
ATOM	3335	C	LEU	598	32.117	18.311	32.543	1.00	21.05	A	C
ATOM	3336	O	LEU	598	32.207	18.814	33.654	1.00	19.87	A	O
ATOM	3337	N	GLN	599	33.084	18.380	31.632	1.00	21.95	A	N
ATOM	3338	CA	GLN	599	34.347	19.091	31.871	1.00	25.41	A	C
ATOM	3339	CB	GLN	599	35.222	19.065	30.607	1.00	23.09	A	C
ATOM	3340	CG	GLN	599	36.582	19.726	30.777	1.00	25.80	A	C
ATOM	3341	CD	GLN	599	37.556	19.367	29.666	1.00	31.84	A	C
ATOM	3342	OE1	GLN	599	37.516	19.934	28.570	1.00	33.73	A	O
ATOM	3343	NE2	GLN	599	38.438	18.416	29.945	1.00	28.95	A	N
ATOM	3344	C	GLN	599	34.081	20.536	32.292	1.00	24.06	A	C

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ATOM	3345	O	GLN	599	34.535	20.987	33.340	1.00	25.40	A	O
ATOM	3346	N	GLN	600	33.314	21.233	31.467	1.00	25.79	A	N
ATOM	3347	CA	GLN	600	32.935	22.617	31.702	1.00	28.30	A	C
ATOM	3348	CB	GLN	600	32.065	23.078	30.532	1.00	35.35	A	C
ATOM	3349	CG	GLN	600	31.048	24.163	30.813	1.00	42.40	A	C
ATOM	3350	CD	GLN	600	29.846	24.049	29.883	1.00	48.10	A	C
ATOM	3351	OE1	GLN	600	28.714	23.849	30.335	1.00	50.64	A	O
ATOM	3352	NE2	GLN	600	30.094	24.144	28.575	1.00	50.36	A	N
ATOM	3353	C	GLN	600	32.221	22.799	33.047	1.00	28.14	A	C
ATOM	3354	O	GLN	600	32.619	23.644	33.853	1.00	29.41	A	O
ATOM	3355	N	GLN	601	31.206	21.984	33.312	1.00	23.77	A	N
ATOM	3356	CA	GLN	601	30.468	22.080	34.568	1.00	25.78	A	C
ATOM	3357	CB	GLN	601	29.234	21.185	34.542	1.00	26.93	A	C
ATOM	3358	CG	GLN	601	28.136	21.669	33.619	1.00	35.25	A	C
ATOM	3359	CD	GLN	601	27.325	22.805	34.212	1.00	40.72	A	C
ATOM	3360	OE1	GLN	601	26.110	22.888	34.007	1.00	43.64	A	O
ATOM	3361	NE2	GLN	601	27.986	23.678	34.961	1.00	41.65	A	N
ATOM	3362	C	GLN	601	31.311	21.762	35.802	1.00	25.94	A	C
ATOM	3363	O	GLN	601	31.086	22.327	36.866	1.00	25.19	A	O
ATOM	3364	N	LEU	602	32.261	20.842	35.673	1.00	25.36	A	N
ATOM	3365	CA	LEU	602	33.127	20.495	36.800	1.00	27.13	A	C
ATOM	3366	CB	LEU	602	33.966	19.249	36.484	1.00	22.76	A	C
ATOM	3367	CG	LEU	602	33.264	17.891	36.437	1.00	20.99	A	C
ATOM	3368	CD1	LEU	602	34.268	16.795	36.104	1.00	18.94	A	C
ATOM	3369	CD2	LEU	602	32.627	17.615	37.778	1.00	17.79	A	C
ATOM	3370	C	LEU	602	34.054	21.679	37.092	1.00	30.59	A	C
ATOM	3371	O	LEU	602	34.386	21.961	38.241	1.00	30.64	A	O
ATOM	3372	N	LYS	603	34.458	22.368	36.033	1.00	33.16	A	N
ATOM	3373	CA	LYS	603	35.340	23.520	36.141	1.00	37.38	A	C
ATOM	3374	CB	LYS	603	35.852	23.887	34.744	1.00	38.36	A	C
ATOM	3375	CG	LYS	603	36.811	25.057	34.688	1.00	42.81	A	C
ATOM	3376	CD	LYS	603	37.293	25.284	33.255	1.00	44.40	A	C
ATOM	3377	CE	LYS	603	38.139	26.547	33.144	1.00	48.06	A	C
ATOM	3378	NZ	LYS	603	39.335	26.518	34.039	1.00	49.72	A	N
ATOM	3379	C	LYS	603	34.636	24.718	36.797	1.00	37.91	A	C
ATOM	3380	O	LYS	603	35.232	25.432	37.598	1.00	38.42	A	O
ATOM	3381	N	GLU	604	33.352	24.889	36.500	1.00	38.93	A	N
ATOM	3382	CA	GLU	604	32.570	26.004	37.037	1.00	40.70	A	C
ATOM	3383	CB	GLU	604	31.478	26.406	36.037	1.00	42.44	A	C
ATOM	3384	CG	GLU	604	31.997	26.933	34.705	1.00	48.98	A	C
ATOM	3385	CD	GLU	604	30.900	27.114	33.653	1.00	52.85	A	C
ATOM	3386	OE1	GLU	604	29.702	27.071	34.010	1.00	55.88	A	O
ATOM	3387	OE2	GLU	604	31.237	27.293	32.461	1.00	52.68	A	O
ATOM	3388	C	GLU	604	31.925	25.794	38.408	1.00	39.31	A	C
ATOM	3389	O	GLU	604	31.715	26.758	39.136	1.00	39.65	A	O
ATOM	3390	N	LEU	605	31.611	24.549	38.757	1.00	35.02	A	N
ATOM	3391	CA	LEU	605	30.944	24.250	40.025	1.00	33.75	A	C
ATOM	3392	CB	LEU	605	29.893	23.158	39.809	1.00	34.96	A	C
ATOM	3393	CG	LEU	605	28.774	23.352	38.785	1.00	35.61	A	C
ATOM	3394	CD1	LEU	605	27.889	22.117	38.782	1.00	38.00	A	C
ATOM	3395	CD2	LEU	605	27.960	24.591	39.114	1.00	36.80	A	C
ATOM	3396	C	LEU	605	31.813	23.839	41.218	1.00	33.04	A	C
ATOM	3397	O	LEU	605	31.387	23.965	42.361	1.00	33.74	A	O
ATOM	3398	N	THR	606	33.003	23.309	40.959	1.00	33.34	A	N
ATOM	3399	CA	THR	606	33.879	22.855	42.038	1.00	31.19	A	C
ATOM	3400	CB	THR	606	35.010	21.943	41.504	1.00	31.57	A	C
ATOM	3401	OG1	THR	606	34.431	20.937	40.652	1.00	31.26	A	O
ATOM	3402	CG2	THR	606	35.743	21.262	42.656	1.00	27.17	A	C
ATOM	3403	C	THR	606	34.501	23.998	42.830	1.00	30.55	A	C
ATOM	3404	O	THR	606	35.195	24.847	42.268	1.00	27.65	A	O
ATOM	3405	N	ALA	607	34.217	24.018	44.129	1.00	30.25	A	N
ATOM	3406	CA	ALA	607	34.752	25.028	45.037	1.00	31.23	A	C
ATOM	3407	CB	ALA	607	33.715	25.390	46.090	1.00	32.45	A	C
ATOM	3408	C	ALA	607	35.995	24.443	45.702	1.00	32.83	A	C
ATOM	3409	O	ALA	607	35.934	23.377	46.309	1.00	32.77	A	O
ATOM	3410	N	PRO	608	37.134	25.141	45.607	1.00	34.06	A	N
ATOM	3411	CD	PRO	608	37.297	26.418	44.893	1.00	34.47	A	C
ATOM	3412	CA	PRO	608	38.411	24.708	46.186	1.00	36.38	A	C
ATOM	3413	CB	PRO	608	39.330	25.896	45.899	1.00	35.87	A	C
ATOM	3414	CG	PRO	608	38.778	26.443	44.633	1.00	36.26	A	C
ATOM	3415	C	PRO	608	38.407	24.367	47.676	1.00	36.67	A	C
ATOM	3416	O	PRO	608	39.076	23.427	48.094	1.00	38.59	A	O
ATOM	3417	N	ASP	609	37.651	25.119	48.466	1.00	39.62	A	N
ATOM	3418	CA	ASP	609	37.590	24.914	49.920	1.00	42.23	A	C
ATOM	3419	CB	ASP	609	37.234	26.236	50.610	1.00	46.49	A	C
ATOM	3420	CG	ASP	609	35.924	26.836	50.098	1.00	51.37	A	C

ATOM	3421	OD1	ASP	609	35.982	27.807	49.310	1.00	55.16	A	O
ATOM	3422	OD2	ASP	609	34.838	26.341	50.482	1.00	53.26	A	O
ATOM	3423	C	ASP	609	36.661	23.803	50.439	1.00	42.98	A	C
ATOM	3424	O	ASP	609	36.813	23.338	51.576	1.00	43.04	A	O
ATOM	3425	N	GLU	610	35.699	23.385	49.624	1.00	40.76	A	N
ATOM	3426	CA	GLU	610	34.756	22.354	50.045	1.00	42.17	A	C
ATOM	3427	CB	GLU	610	33.584	22.261	49.067	1.00	45.78	A	C
ATOM	3428	CG	GLU	610	32.486	23.287	49.339	1.00	53.94	A	C
ATOM	3429	CD	GLU	610	31.657	22.962	50.587	1.00	61.29	A	C
ATOM	3430	OE1	GLU	610	30.406	22.970	50.482	1.00	63.06	A	O
ATOM	3431	OE2	GLU	610	32.239	22.683	51.666	1.00	63.37	A	O
ATOM	3432	C	GLU	610	35.335	20.973	50.323	1.00	39.93	A	C
ATOM	3433	O	GLU	610	36.288	20.534	49.680	1.00	38.97	A	O
ATOM	3434	N	ASN	611	34.768	20.308	51.324	1.00	38.15	A	N
ATOM	3435	CA	ASN	611	35.201	18.971	51.706	1.00	38.79	A	C
ATOM	3436	CB	ASN	611	34.661	18.620	53.093	1.00	41.80	A	C
ATOM	3437	CG	ASN	611	33.176	18.904	53.230	1.00	47.08	A	C
ATOM	3438	OD1	ASN	611	32.356	17.988	53.255	1.00	48.51	A	O
ATOM	3439	ND2	ASN	611	32.823	20.187	53.315	1.00	51.24	A	N
ATOM	3440	C	ASN	611	34.730	17.950	50.671	1.00	36.83	A	C
ATOM	3441	O	ASN	611	33.894	18.263	49.822	1.00	35.72	A	O
ATOM	3442	N	ILE	612	35.251	16.730	50.764	1.00	34.86	A	N
ATOM	3443	CA	ILE	612	34.909	15.660	49.829	1.00	35.21	A	C
ATOM	3444	CB	ILE	612	35.565	14.322	50.254	1.00	37.20	A	C
ATOM	3445	CG2	ILE	612	34.986	13.147	49.464	1.00	37.12	A	C
ATOM	3446	CG1	ILE	612	37.078	14.424	50.044	1.00	38.68	A	C
ATOM	3447	CD1	ILE	612	37.855	13.239	50.550	1.00	44.05	A	C
ATOM	3448	C	ILE	612	33.414	15.495	49.522	1.00	33.08	A	C
ATOM	3449	O	ILE	612	33.025	15.516	48.358	1.00	32.29	A	O
ATOM	3450	N	PRO	613	32.561	15.350	50.556	1.00	33.66	A	N
ATOM	3451	CD	PRO	613	32.881	15.227	51.992	1.00	33.93	A	C
ATOM	3452	CA	PRO	613	31.118	15.194	50.342	1.00	30.68	A	C
ATOM	3453	CB	PRO	613	30.565	15.276	51.761	1.00	32.96	A	C
ATOM	3454	CG	PRO	613	31.629	14.602	52.551	1.00	34.47	A	C
ATOM	3455	C	PRO	613	30.536	16.297	49.459	1.00	28.71	A	C
ATOM	3456	O	PRO	613	29.730	16.028	48.575	1.00	26.90	A	O
ATOM	3457	N	ALA	614	30.959	17.537	49.702	1.00	27.44	A	N
ATOM	3458	CA	ALA	614	30.484	18.679	48.926	1.00	25.45	A	C
ATOM	3459	CB	ALA	614	30.895	19.979	49.587	1.00	28.54	A	C
ATOM	3460	C	ALA	614	31.006	18.624	47.495	1.00	23.49	A	C
ATOM	3461	O	ALA	614	30.307	19.003	46.568	1.00	22.49	A	O
ATOM	3462	N	LYS	615	32.249	18.191	47.319	1.00	21.72	A	N
ATOM	3463	CA	LYS	615	32.799	18.071	45.978	1.00	23.92	A	C
ATOM	3464	CB	LYS	615	34.299	17.780	46.017	1.00	24.67	A	C
ATOM	3465	CG	LYS	615	35.112	19.010	46.399	1.00	25.77	A	C
ATOM	3466	CD	LYS	615	36.518	18.935	45.864	1.00	28.91	A	C
ATOM	3467	CE	LYS	615	37.201	20.282	45.935	1.00	29.06	A	C
ATOM	3468	NZ	LYS	615	37.437	20.717	47.334	1.00	34.89	A	N
ATOM	3469	C	LYS	615	32.043	16.994	45.200	1.00	24.30	A	C
ATOM	3470	O	LYS	615	31.784	17.142	44.003	1.00	25.97	A	O
ATOM	3471	N	ILE	616	31.631	15.941	45.896	1.00	25.77	A	N
ATOM	3472	CA	ILE	616	30.879	14.875	45.252	1.00	24.96	A	C
ATOM	3473	CB	ILE	616	30.730	13.659	46.170	1.00	26.34	A	C
ATOM	3474	CG2	ILE	616	29.784	12.631	45.545	1.00	24.89	A	C
ATOM	3475	CG1	ILE	616	32.107	13.023	46.391	1.00	25.12	A	C
ATOM	3476	CD1	ILE	616	32.113	11.971	47.470	1.00	29.19	A	C
ATOM	3477	C	ILE	616	29.518	15.395	44.789	1.00	24.59	A	C
ATOM	3478	O	ILE	616	29.060	15.049	43.699	1.00	23.45	A	O
ATOM	3479	N	LEU	617	28.911	16.277	45.584	1.00	24.95	A	N
ATOM	3480	CA	LEU	617	27.620	16.873	45.227	1.00	25.48	A	C
ATOM	3481	CB	LEU	617	27.163	17.859	46.314	1.00	26.95	A	C
ATOM	3482	CG	LEU	617	25.680	18.217	46.480	1.00	29.68	A	C
ATOM	3483	CD1	LEU	617	25.562	19.541	47.230	1.00	25.24	A	C
ATOM	3484	CD2	LEU	617	24.960	18.313	45.149	1.00	28.88	A	C
ATOM	3485	C	LEU	617	27.820	17.631	43.909	1.00	25.31	A	C
ATOM	3486	O	LEU	617	26.981	17.565	43.009	1.00	26.56	A	O
ATOM	3487	N	SER	618	28.943	18.345	43.810	1.00	23.08	A	N
ATOM	3488	CA	SER	618	29.283	19.108	42.616	1.00	23.57	A	C
ATOM	3489	CB	SER	618	30.542	19.945	42.853	1.00	23.29	A	C
ATOM	3490	OG	SER	618	30.264	21.035	43.707	1.00	35.22	A	O
ATOM	3491	C	SER	618	29.499	18.196	41.415	1.00	19.81	A	C
ATOM	3492	O	SER	618	29.097	18.525	40.304	1.00	18.76	A	O
ATOM	3493	N	TYR	619	30.195	17.082	41.629	1.00	21.42	A	N
ATOM	3494	CA	TYR	619	30.433	16.136	40.539	1.00	21.76	A	C
ATOM	3495	CB	TYR	619	31.314	14.969	40.993	1.00	20.31	A	C
ATOM	3496	CG	TYR	619	31.574	13.948	39.895	1.00	21.86	A	C

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ATOM	3497	CD1	TYR	619	32.712	14.030	39.101	1.00	20.68	A	C
ATOM	3498	CE1	TYR	619	32.930	13.134	38.066	1.00	23.92	A	C
ATOM	3499	CD2	TYR	619	30.657	12.928	39.627	1.00	23.24	A	C
ATOM	3500	CE2	TYR	619	30.866	12.018	38.588	1.00	21.41	A	C
ATOM	3501	CZ	TYR	619	32.004	12.131	37.809	1.00	26.37	A	C
ATOM	3502	OH	TYR	619	32.212	11.264	36.745	1.00	28.77	A	O
ATOM	3503	C	TYR	619	29.074	15.609	40.062	1.00	22.41	A	C
ATOM	3504	O	TYR	619	28.795	15.588	38.861	1.00	23.25	A	O
ATOM	3505	N	ASN	620	28.219	15.238	41.012	1.00	21.06	A	N
ATOM	3506	CA	ASN	620	26.895	14.718	40.681	1.00	25.28	A	C
ATOM	3507	CB	ASN	620	26.203	14.154	41.922	1.00	28.61	A	C
ATOM	3508	CG	ASN	620	26.896	12.899	42.466	1.00	32.54	A	C
ATOM	3509	OD1	ASN	620	26.930	12.670	43.681	1.00	37.32	A	O
ATOM	3510	ND2	ASN	620	27.457	12.091	41.571	1.00	30.05	A	N
ATOM	3511	C	ASN	620	26.004	15.734	39.966	1.00	26.41	A	C
ATOM	3512	O	ASN	620	25.227	15.363	39.087	1.00	24.01	A	O
ATOM	3513	N	ARG	621	26.125	17.015	40.310	1.00	24.75	A	N
ATOM	3514	CA	ARG	621	25.317	18.017	39.623	1.00	26.14	A	C
ATOM	3515	CB	ARG	621	25.361	19.364	40.343	1.00	28.03	A	C
ATOM	3516	CG	ARG	621	24.722	19.297	41.724	1.00	35.27	A	C
ATOM	3517	CD	ARG	621	23.916	20.542	42.065	1.00	38.69	A	C
ATOM	3518	NE	ARG	621	24.665	21.487	42.882	1.00	41.56	A	N
ATOM	3519	CZ	ARG	621	24.210	22.034	44.007	1.00	44.10	A	C
ATOM	3520	NH1	ARG	621	22.999	21.734	44.466	1.00	42.05	A	N
ATOM	3521	NH2	ARG	621	24.971	22.892	44.674	1.00	46.30	A	N
ATOM	3522	C	ARG	621	25.793	18.156	38.177	1.00	26.02	A	C
ATOM	3523	O	ARG	621	24.988	18.308	37.262	1.00	24.99	A	O
ATOM	3524	N	ALA	622	27.102	18.053	37.974	1.00	23.94	A	N
ATOM	3525	CA	ALA	622	27.671	18.164	36.640	1.00	25.67	A	C
ATOM	3526	CB	ALA	622	29.201	18.194	36.714	1.00	26.93	A	C
ATOM	3527	C	ALA	622	27.193	16.990	35.789	1.00	24.43	A	C
ATOM	3528	O	ALA	622	26.798	17.172	34.640	1.00	23.41	A	O
ATOM	3529	N	ASN	623	27.181	15.804	36.392	1.00	22.06	A	N
ATOM	3530	CA	ASN	623	26.749	14.569	35.731	1.00	25.94	A	C
ATOM	3531	CB	ASN	623	27.018	13.381	36.663	1.00	27.63	A	C
ATOM	3532	CG	ASN	623	27.034	12.033	35.940	1.00	32.87	A	C
ATOM	3533	OD1	ASN	623	27.462	11.030	36.515	1.00	36.28	A	O
ATOM	3534	ND2	ASN	623	26.558	11.997	34.696	1.00	28.08	A	N
ATOM	3535	C	ASN	623	25.257	14.647	35.399	1.00	25.59	A	C
ATOM	3536	O	ASN	623	24.799	14.168	34.355	1.00	24.18	A	O
ATOM	3537	N	ARG	624	24.517	15.278	36.297	1.00	26.14	A	N
ATOM	3538	CA	ARG	624	23.078	15.455	36.162	1.00	29.76	A	C
ATOM	3539	CB	ARG	624	22.544	16.064	37.452	1.00	32.54	A	C
ATOM	3540	CG	ARG	624	21.151	15.666	37.834	1.00	36.61	A	C
ATOM	3541	CD	ARG	624	20.926	15.949	39.312	1.00	39.88	A	C
ATOM	3542	NE	ARG	624	21.452	14.868	40.136	1.00	42.95	A	N
ATOM	3543	CZ	ARG	624	22.213	15.027	41.214	1.00	44.00	A	C
ATOM	3544	NH1	ARG	624	22.559	16.239	41.631	1.00	39.02	A	N
ATOM	3545	NH2	ARG	624	22.635	13.952	41.871	1.00	44.11	A	N
ATOM	3546	C	ARG	624	22.759	16.351	34.966	1.00	30.00	A	C
ATOM	3547	O	ARG	624	21.831	16.075	34.208	1.00	30.37	A	O
ATOM	3548	N	ALA	625	23.564	17.392	34.771	1.00	28.58	A	N
ATOM	3549	CA	ALA	625	23.376	18.309	33.647	1.00	29.80	A	C
ATOM	3550	CB	ALA	625	24.367	19.474	33.746	1.00	27.96	A	C
ATOM	3551	C	ALA	625	23.566	17.546	32.326	1.00	29.42	A	C
ATOM	3552	O	ALA	625	22.931	17.851	31.314	1.00	30.31	A	O
ATOM	3553	N	VAL	626	24.459	16.565	32.341	1.00	27.36	A	N
ATOM	3554	CA	VAL	626	24.708	15.740	31.163	1.00	25.79	A	C
ATOM	3555	CB	VAL	626	25.978	14.873	31.356	1.00	24.17	A	C
ATOM	3556	CG1	VAL	626	26.034	13.758	30.319	1.00	18.34	A	C
ATOM	3557	CG2	VAL	626	27.222	15.751	31.275	1.00	24.78	A	C
ATOM	3558	C	VAL	626	23.504	14.817	30.944	1.00	25.50	A	C
ATOM	3559	O	VAL	626	23.000	14.692	29.838	1.00	24.54	A	O
ATOM	3560	N	ALA	627	23.034	14.204	32.023	1.00	26.54	A	N
ATOM	3561	CA	ALA	627	21.906	13.284	31.957	1.00	29.50	A	C
ATOM	3562	CB	ALA	627	21.678	12.643	33.314	1.00	27.74	A	C
ATOM	3563	C	ALA	627	20.625	13.949	31.449	1.00	31.39	A	C
ATOM	3564	O	ALA	627	19.914	13.374	30.619	1.00	29.24	A	O
ATOM	3565	N	ILE	628	20.334	15.149	31.951	1.00	32.25	A	N
ATOM	3566	CA	ILE	628	19.143	15.890	31.535	1.00	35.85	A	C
ATOM	3567	CB	ILE	628	19.008	17.252	32.298	1.00	37.26	A	C
ATOM	3568	CG2	ILE	628	18.285	18.294	31.450	1.00	39.09	A	C
ATOM	3569	CG1	ILE	628	18.223	17.070	33.597	1.00	40.64	A	C
ATOM	3570	CD1	ILE	628	18.970	16.379	34.693	1.00	43.65	A	C
ATOM	3571	C	ILE	628	19.225	16.150	30.034	1.00	36.25	A	C
ATOM	3572	O	ILE	628	18.240	15.984	29.312	1.00	37.55	A	O

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ATOM	3573	N	LEU	629	20.420	16.523	29.580	1.00	36.88	A	N
ATOM	3574	CA	LEU	629	20.681	16.818	28.175	1.00	39.31	A	C
ATOM	3575	CB	LEU	629	22.104	17.370	28.033	1.00	42.19	A	C
ATOM	3576	CG	LEU	629	22.614	18.003	26.736	1.00	48.38	A	C
ATOM	3577	CD1	LEU	629	23.794	18.933	27.053	1.00	50.17	A	C
ATOM	3578	CD2	LEU	629	23.033	16.934	25.739	1.00	49.01	A	C
ATOM	3579	C	LEU	629	20.468	15.588	27.282	1.00	38.72	A	C
ATOM	3580	O	LEU	629	19.854	15.696	26.220	1.00	38.49	A	O
ATOM	3581	N	CYS	630	20.959	14.431	27.731	1.00	36.60	A	N
ATOM	3582	CA	CYS	630	20.824	13.166	27.003	1.00	38.07	A	C
ATOM	3583	CB	CYS	630	21.862	12.143	27.497	1.00	37.70	A	C
ATOM	3584	SG	CYS	630	23.625	12.510	27.223	1.00	43.29	A	S
ATOM	3585	C	CYS	630	19.431	12.546	27.191	1.00	37.67	A	C
ATOM	3586	O	CYS	630	19.141	11.475	26.646	1.00	38.95	A	O
ATOM	3587	N	ASN	631	18.582	13.225	27.958	1.00	35.69	A	N
ATOM	3588	CA	ASN	631	17.230	12.762	28.287	1.00	35.71	A	C
ATOM	3589	CB	ASN	631	16.272	12.791	27.087	1.00	33.95	A	C
ATOM	3590	CG	ASN	631	14.796	12.686	27.516	1.00	34.84	A	C
ATOM	3591	OD1	ASN	631	13.991	11.997	26.887	1.00	34.15	A	O
ATOM	3592	ND2	ASN	631	14.452	13.367	28.599	1.00	28.69	A	N
ATOM	3593	C	ASN	631	17.226	11.374	28.930	1.00	35.36	A	C
ATOM	3594	O	ASN	631	16.395	10.524	28.603	1.00	33.95	A	O
ATOM	3595	N	HIS	632	18.193	11.138	29.810	1.00	35.51	A	N
ATOM	3596	CA	HIS	632	18.272	9.871	30.519	1.00	37.71	A	C
ATOM	3597	CB	HIS	632	19.721	9.534	30.870	1.00	35.28	A	C
ATOM	3598	CG	HIS	632	20.550	9.153	29.682	1.00	35.39	A	C
ATOM	3599	CD2	HIS	632	20.206	8.589	28.498	1.00	32.74	A	C
ATOM	3600	ND1	HIS	632	21.912	9.356	29.627	1.00	33.68	A	N
ATOM	3601	CE1	HIS	632	22.370	8.938	28.460	1.00	34.81	A	C
ATOM	3602	NE2	HIS	632	21.356	8.468	27.756	1.00	28.60	A	N
ATOM	3603	C	HIS	632	17.396	10.011	31.763	1.00	39.18	A	C
ATOM	3604	O	HIS	632	17.877	10.059	32.899	1.00	37.24	A	O
ATOM	3605	N	GLN	633	16.097	10.138	31.506	1.00	41.76	A	N
ATOM	3606	CA	GLN	633	15.096	10.294	32.544	1.00	45.98	A	C
ATOM	3607	CB	GLN	633	13.844	10.967	31.987	1.00	47.48	A	C
ATOM	3608	CG	GLN	633	14.026	12.447	31.704	1.00	54.85	A	C
ATOM	3609	CD	GLN	633	12.748	13.112	31.231	1.00	57.84	A	C
ATOM	3610	OE1	GLN	633	12.128	12.671	30.257	1.00	60.52	A	O
ATOM	3611	NE2	GLN	633	12.345	14.180	31.916	1.00	57.02	A	N
ATOM	3612	C	GLN	633	14.727	8.991	33.219	1.00	46.99	A	C
ATOM	3613	O	GLN	633	14.940	7.906	32.681	1.00	46.61	A	O
ATOM	3614	N	ARG	634	14.156	9.135	34.373	1.00	15.00	A	N
ATOM	3616	CA	ARG	634	13.723	8.047	35.241	1.00	15.00	A	C
ATOM	3617	CB	ARG	634	14.791	7.754	36.297	1.00	15.00	A	C
ATOM	3618	CG	ARG	634	15.408	6.369	36.187	1.00	15.00	A	C
ATOM	3619	CD	ARG	634	15.938	5.892	37.529	1.00	15.00	A	C
ATOM	3620	NE	ARG	634	15.830	6.922	38.556	1.00	15.00	A	N
ATOM	3622	CZ	ARG	634	16.221	6.762	39.816	1.00	15.00	A	C
ATOM	3623	NH1	ARG	634	16.750	5.613	40.208	1.00	15.00	A	N
ATOM	3626	NH2	ARG	634	16.085	7.753	40.684	1.00	15.00	A	N
ATOM	3629	C	ARG	634	12.400	8.384	35.922	1.00	15.00	A	C
ATOM	3630	O	ARG	634	12.116	9.586	36.115	1.00	54.98	A	O
ATOM	3631	N	ALA	635	11.583	7.398	36.198	1.00	58.95	A	N
ATOM	3632	CA	ALA	635	10.312	7.620	36.880	1.00	61.12	A	C
ATOM	3633	CB	ALA	635	9.295	6.569	36.457	1.00	61.39	A	C
ATOM	3634	C	ALA	635	10.616	7.496	38.370	1.00	62.56	A	C
ATOM	3635	O	ALA	635	11.448	6.674	38.763	1.00	62.38	A	O
ATOM	3636	N	PRO	636	9.970	8.323	39.213	1.00	63.84	A	N
ATOM	3637	CD	PRO	636	8.975	9.349	38.852	1.00	64.11	A	C
ATOM	3638	CA	PRO	636	10.182	8.296	40.667	1.00	65.55	A	C
ATOM	3639	CB	PRO	636	9.042	9.168	41.184	1.00	65.31	A	C
ATOM	3640	CG	PRO	636	8.918	10.198	40.101	1.00	65.36	A	C
ATOM	3641	C	PRO	636	10.137	6.867	41.242	1.00	68.11	A	C
ATOM	3642	O	PRO	636	9.157	6.143	41.063	1.00	68.17	A	O
ATOM	3643	N	PRO	637	11.220	6.449	41.924	1.00	69.89	A	N
ATOM	3644	CD	PRO	637	12.356	7.374	42.111	1.00	69.76	A	C
ATOM	3645	CA	PRO	637	11.501	5.163	42.583	1.00	72.66	A	C
ATOM	3646	CB	PRO	637	12.682	5.516	43.489	1.00	72.76	A	C
ATOM	3647	CG	PRO	637	13.448	6.470	42.637	1.00	71.74	A	C
ATOM	3648	C	PRO	637	10.406	4.376	43.339	1.00	74.86	A	C
ATOM	3649	O	PRO	637	10.430	4.290	44.565	1.00	74.72	A	O
ATOM	3650	N	LYS	638	9.512	3.733	42.583	1.00	77.75	A	N
ATOM	3651	CA	LYS	638	8.404	2.886	43.080	1.00	79.75	A	C
ATOM	3652	CB	LYS	638	8.805	1.411	42.874	1.00	80.89	A	C
ATOM	3653	CG	LYS	638	7.687	0.384	42.941	1.00	82.77	A	C
ATOM	3654	CD	LYS	638	6.771	0.528	41.751	1.00	84.32	A	C



ATOM	3655	CE	LYS	638	5.714	-0.561	41.721	1.00	86.11	A	C
ATOM	3656	NZ	LYS	638	4.805	-0.424	40.535	1.00	87.26	A	N
ATOM	3657	C	LYS	638	7.859	3.099	44.510	1.00	80.64	A	C
ATOM	3658	O	LYS	638	7.405	2.153	45.145	1.00	81.14	A	O
ATOM	3659	N	ALA	639	7.788	4.353	44.952	1.00	81.37	A	N
ATOM	3660	CA	ALA	639	7.318	4.719	46.293	1.00	81.96	A	C
ATOM	3661	CB	ALA	639	6.072	3.962	46.679	1.00	81.66	A	C
ATOM	3662	C	ALA	639	8.387	4.574	47.365	1.00	82.24	A	C
ATOM	3663	O	ALA	639	8.197	5.060	48.477	1.00	81.92	A	O
ATOM	3664	N	ALA	640	9.520	3.957	47.009	1.00	82.42	A	N
ATOM	3665	CA	ALA	640	10.670	3.794	47.913	1.00	82.74	A	C
ATOM	3666	CB	ALA	640	11.664	2.769	47.347	1.00	82.54	A	C
ATOM	3667	C	ALA	640	11.355	5.159	48.055	1.00	82.52	A	C
ATOM	3668	O	ALA	640	12.337	5.314	48.785	1.00	82.59	A	O
ATOM	3669	N	GLU	641	10.798	6.139	47.346	1.00	81.95	A	N
ATOM	3670	CA	GLU	641	11.265	7.516	47.334	1.00	80.96	A	C
ATOM	3671	CB	GLU	641	10.517	8.307	46.264	1.00	80.65	A	C
ATOM	3672	CG	GLU	641	11.418	9.065	45.316	1.00	79.32	A	C
ATOM	3673	CD	GLU	641	12.288	10.096	46.014	1.00	78.87	A	C
ATOM	3674	OE1	GLU	641	13.530	9.997	45.912	1.00	77.92	A	O
ATOM	3675	OE2	GLU	641	11.733	11.020	46.646	1.00	77.43	A	O
ATOM	3676	C	GLU	641	11.013	8.147	48.687	1.00	80.04	A	C
ATOM	3677	O	GLU	641	11.711	9.077	49.081	1.00	80.11	A	O
ATOM	3678	N	LYS	642	10.003	7.636	49.390	1.00	79.37	A	N
ATOM	3679	CA	LYS	642	9.656	8.120	50.719	1.00	78.02	A	C
ATOM	3680	CB	LYS	642	8.311	7.552	51.177	1.00	78.91	A	C
ATOM	3681	CG	LYS	642	7.120	8.294	50.597	1.00	80.10	A	C
ATOM	3682	CD	LYS	642	5.820	7.881	51.270	1.00	81.17	A	C
ATOM	3683	CE	LYS	642	4.642	8.725	50.790	1.00	81.47	A	C
ATOM	3684	NZ	LYS	642	4.802	10.172	51.118	1.00	80.86	A	N
ATOM	3685	C	LYS	642	10.755	7.814	51.736	1.00	76.67	A	C
ATOM	3686	O	LYS	642	10.595	8.052	52.933	1.00	76.89	A	O
ATOM	3687	N	SER	643	11.871	7.274	51.245	1.00	74.84	A	N
ATOM	3688	CA	SER	643	13.034	6.980	52.076	1.00	72.40	A	C
ATOM	3689	CB	SER	643	14.026	6.093	51.323	1.00	72.01	A	C
ATOM	3690	OG	SER	643	14.551	6.763	50.191	1.00	70.85	A	O
ATOM	3691	C	SER	643	13.687	8.329	52.392	1.00	71.71	A	C
ATOM	3692	O	SER	643	14.716	8.403	53.068	1.00	70.48	A	O
ATOM	3693	N	MET	644	13.093	9.383	51.837	1.00	70.94	A	N
ATOM	3694	CA	MET	644	13.530	10.755	52.036	1.00	71.02	A	C
ATOM	3695	CB	MET	644	12.823	11.670	51.037	1.00	71.05	A	C
ATOM	3696	CG	MET	644	13.633	12.874	50.617	1.00	73.88	A	C
ATOM	3697	SD	MET	644	15.216	12.402	49.869	1.00	76.90	A	S
ATOM	3698	CE	MET	644	14.672	11.416	48.490	1.00	74.80	A	C
ATOM	3699	C	MET	644	13.126	11.130	53.458	1.00	70.75	A	C
ATOM	3700	O	MET	644	13.733	12.001	54.080	1.00	69.99	A	O
ATOM	3701	N	MET	645	12.087	10.460	53.955	1.00	71.25	A	N
ATOM	3702	CA	MET	645	11.578	10.669	55.307	1.00	72.21	A	C
ATOM	3703	CB	MET	645	10.235	9.949	55.494	1.00	75.43	A	C
ATOM	3704	CG	MET	645	9.135	10.379	54.523	1.00	79.63	A	C
ATOM	3705	SD	MET	645	7.635	9.350	54.623	1.00	84.61	A	S
ATOM	3706	CE	MET	645	6.565	10.390	55.646	1.00	83.71	A	C
ATOM	3707	C	MET	645	12.598	10.113	56.299	1.00	70.59	A	C
ATOM	3708	O	MET	645	12.781	10.664	57.382	1.00	69.71	A	O
ATOM	3709	N	ASN	646	13.264	9.026	55.912	1.00	69.43	A	N
ATOM	3710	CA	ASN	646	14.277	8.390	56.756	1.00	69.65	A	C
ATOM	3711	CB	ASN	646	14.694	7.035	56.178	1.00	70.50	A	C
ATOM	3712	CG	ASN	646	13.544	6.047	56.113	1.00	73.19	A	C
ATOM	3713	OD1	ASN	646	12.594	6.125	56.899	1.00	74.45	A	O
ATOM	3714	ND2	ASN	646	13.622	5.110	55.172	1.00	72.47	A	N
ATOM	3715	C	ASN	646	15.506	9.280	56.923	1.00	68.62	A	C
ATOM	3716	O	ASN	646	16.132	9.292	57.985	1.00	68.41	A	O
ATOM	3717	N	LEU	647	15.861	10.005	55.864	1.00	66.31	A	N
ATOM	3718	CA	LEU	647	17.003	10.908	55.916	1.00	63.63	A	C
ATOM	3719	CB	LEU	647	17.461	11.298	54.509	1.00	64.19	A	C
ATOM	3720	CG	LEU	647	18.034	10.179	53.637	1.00	64.82	A	C
ATOM	3721	CD1	LEU	647	18.558	10.775	52.345	1.00	63.41	A	C
ATOM	3722	CD2	LEU	647	19.151	9.445	54.373	1.00	64.78	A	C
ATOM	3723	C	LEU	647	16.650	12.152	56.725	1.00	61.33	A	C
ATOM	3724	O	LEU	647	17.476	12.648	57.489	1.00	60.05	A	O
ATOM	3725	N	GLN	648	15.419	12.637	56.571	1.00	59.43	A	N
ATOM	3726	CA	GLN	648	14.960	13.811	57.305	1.00	59.20	A	C
ATOM	3727	CB	GLN	648	13.566	14.246	56.846	1.00	61.22	A	C
ATOM	3728	CG	GLN	648	13.545	15.002	55.517	1.00	64.08	A	C
ATOM	3729	CD	GLN	648	14.357	16.288	55.554	1.00	65.66	A	C
ATOM	3730	OE1	GLN	648	14.176	17.128	56.441	1.00	65.74	A	O

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ATOM	3731	NE2	GLN	648	15.261	16.446	54.588	1.00	64.93	A	N
ATOM	3732	C	GLN	648	14.965	13.578	58.811	1.00	58.36	A	C
ATOM	3733	O	GLN	648	15.345	14.469	59.571	1.00	58.87	A	O
ATOM	3734	N	THR	649	14.557	12.384	59.243	1.00	55.83	A	N
ATOM	3735	CA	THR	649	14.547	12.071	60.669	1.00	54.46	A	C
ATOM	3736	CB	THR	649	13.796	10.749	60.998	1.00	54.66	A	C
ATOM	3737	OG1	THR	649	14.430	9.650	60.338	1.00	57.13	A	O
ATOM	3738	CG2	THR	649	12.339	10.832	60.570	1.00	54.11	A	C
ATOM	3739	C	THR	649	15.980	11.990	61.192	1.00	52.21	A	C
ATOM	3740	O	THR	649	16.254	12.411	62.314	1.00	52.61	A	O
ATOM	3741	N	LYS	650	16.889	11.466	60.372	1.00	49.65	A	N
ATOM	3742	CA	LYS	650	18.294	11.360	60.755	1.00	48.59	A	C
ATOM	3743	CB	LYS	650	19.085	10.548	59.727	1.00	50.34	A	C
ATOM	3744	CG	LYS	650	18.821	9.051	59.762	1.00	55.39	A	C
ATOM	3745	CD	LYS	650	19.647	8.332	58.702	1.00	58.49	A	C
ATOM	3746	CE	LYS	650	19.341	6.843	58.672	1.00	61.73	A	C
ATOM	3747	NZ	LYS	650	20.134	6.134	57.626	1.00	63.46	A	N
ATOM	3748	C	LYS	650	18.916	12.749	60.893	1.00	46.85	A	C
ATOM	3749	O	LYS	650	19.700	12.996	61.807	1.00	46.09	A	O
ATOM	3750	N	ILE	651	18.564	13.644	59.973	1.00	44.79	A	N
ATOM	3751	CA	ILE	651	19.069	15.011	59.982	1.00	44.22	A	C
ATOM	3752	CB	ILE	651	18.651	15.784	58.704	1.00	41.76	A	C
ATOM	3753	CG2	ILE	651	18.983	17.261	58.843	1.00	40.66	A	C
ATOM	3754	CG1	ILE	651	19.362	15.201	57.480	1.00	39.59	A	C
ATOM	3755	CD1	ILE	651	19.034	15.903	56.184	1.00	36.02	A	C
ATOM	3756	C	ILE	651	18.557	15.742	61.217	1.00	44.79	A	C
ATOM	3757	O	ILE	651	19.296	16.495	61.843	1.00	45.78	A	O
ATOM	3758	N	ASP	652	17.298	15.507	61.573	1.00	45.71	A	N
ATOM	3759	CA	ASP	652	16.724	16.144	62.750	1.00	47.49	A	C
ATOM	3760	CB	ASP	652	15.195	16.051	62.743	1.00	50.02	A	C
ATOM	3761	CG	ASP	652	14.557	16.970	61.699	1.00	54.64	A	C
ATOM	3762	OD1	ASP	652	15.019	18.129	61.554	1.00	57.04	A	O
ATOM	3763	OD2	ASP	652	13.592	16.533	61.026	1.00	53.78	A	O
ATOM	3764	C	ASP	652	17.306	15.571	64.038	1.00	46.05	A	C
ATOM	3765	O	ASP	652	17.351	16.251	65.058	1.00	46.76	A	O
ATOM	3766	N	ALA	653	17.772	14.328	63.993	1.00	44.92	A	N
ATOM	3767	CA	ALA	653	18.376	13.728	65.176	1.00	43.65	A	C
ATOM	3768	CB	ALA	653	18.529	12.233	64.999	1.00	44.44	A	C
ATOM	3769	C	ALA	653	19.738	14.384	65.362	1.00	41.92	A	C
ATOM	3770	O	ALA	653	20.131	14.718	66.480	1.00	43.06	A	O
ATOM	3771	N	LYS	654	20.435	14.596	64.248	1.00	40.35	A	N
ATOM	3772	CA	LYS	654	21.752	15.230	64.260	1.00	38.75	A	C
ATOM	3773	CB	LYS	654	22.421	15.114	62.890	1.00	37.67	A	C
ATOM	3774	CG	LYS	654	23.857	15.623	62.858	1.00	36.70	A	C
ATOM	3775	CD	LYS	654	24.752	14.818	63.788	1.00	37.07	A	C
ATOM	3776	CE	LYS	654	24.744	13.338	63.427	1.00	35.20	A	C
ATOM	3777	NZ	LYS	654	25.646	12.539	64.296	1.00	35.94	A	N
ATOM	3778	C	LYS	654	21.648	16.699	64.671	1.00	38.00	A	C
ATOM	3779	O	LYS	654	22.515	17.207	65.378	1.00	37.17	A	O
ATOM	3780	N	LYS	655	20.594	17.378	64.226	1.00	37.83	A	N
ATOM	3781	CA	LYS	655	20.394	18.778	64.598	1.00	40.71	A	C
ATOM	3782	CB	LYS	655	19.217	19.393	63.838	1.00	39.84	A	C
ATOM	3783	CG	LYS	655	19.578	19.808	62.426	1.00	41.54	A	C
ATOM	3784	CD	LYS	655	18.410	20.401	61.670	1.00	42.28	A	C
ATOM	3785	CE	LYS	655	18.853	20.772	60.258	1.00	45.48	A	C
ATOM	3786	NZ	LYS	655	17.747	21.273	59.405	1.00	46.29	A	N
ATOM	3787	C	LYS	655	20.181	18.910	66.104	1.00	40.92	A	C
ATOM	3788	O	LYS	655	20.398	19.976	66.675	1.00	40.42	A	O
ATOM	3789	N	GLU	656	19.768	17.817	66.741	1.00	43.44	A	N
ATOM	3790	CA	GLU	656	19.546	17.816	68.182	1.00	43.53	A	C
ATOM	3791	CB	GLU	656	18.484	16.789	68.583	1.00	49.78	A	C
ATOM	3792	CG	GLU	656	17.114	16.979	67.907	1.00	57.97	A	C
ATOM	3793	CD	GLU	656	16.801	18.430	67.510	1.00	63.89	A	C
ATOM	3794	OE1	GLU	656	16.909	19.341	68.366	1.00	67.26	A	O
ATOM	3795	OE2	GLU	656	16.440	18.656	66.330	1.00	65.81	A	O
ATOM	3796	C	GLU	656	20.846	17.596	68.941	1.00	40.64	A	C
ATOM	3797	O	GLU	656	21.052	18.197	69.991	1.00	40.10	A	O
ATOM	3798	N	GLN	657	21.724	16.745	68.407	1.00	38.53	A	N
ATOM	3799	CA	GLN	657	23.023	16.505	69.034	1.00	36.88	A	C
ATOM	3800	CB	GLN	657	23.794	15.403	68.307	1.00	38.19	A	C
ATOM	3801	CG	GLN	657	23.120	14.035	68.308	1.00	41.67	A	C
ATOM	3802	CD	GLN	657	23.992	12.938	67.697	1.00	41.28	A	C
ATOM	3803	OE1	GLN	657	25.160	13.155	67.379	1.00	39.94	A	O
ATOM	3804	NE2	GLN	657	23.422	11.748	67.549	1.00	42.56	A	N
ATOM	3805	C	GLN	657	23.815	17.812	68.941	1.00	36.41	A	C
ATOM	3806	O	GLN	657	24.406	18.266	69.922	1.00	36.68	A	O

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ATOM	3807	N	LEU	658	23.779	18.433	67.762	1.00	34.20	A	N
ATOM	3808	CA	LEU	658	24.476	19.692	67.530	1.00	31.69	A	C
ATOM	3809	CB	LEU	658	24.294	20.162	66.084	1.00	29.93	A	C
ATOM	3810	CG	LEU	658	24.967	21.501	65.760	1.00	28.88	A	C
ATOM	3811	CD1	LEU	658	26.455	21.430	66.104	1.00	27.70	A	C
ATOM	3812	CD2	LEU	658	24.767	21.854	64.289	1.00	29.95	A	C
ATOM	3813	C	LEU	658	23.967	20.760	68.486	1.00	31.66	A	C
ATOM	3814	O	LEU	658	24.759	21.497	69.067	1.00	34.20	A	O
ATOM	3815	N	ALA	659	22.648	20.852	68.635	1.00	30.76	A	N
ATOM	3816	CA	ALA	659	22.051	21.823	69.544	1.00	31.52	A	C
ATOM	3817	CB	ALA	659	20.545	21.788	69.426	1.00	33.05	A	C
ATOM	3818	C	ALA	659	22.486	21.544	70.991	1.00	34.59	A	C
ATOM	3819	O	ALA	659	22.673	22.473	71.781	1.00	35.38	A	O
ATOM	3820	N	ASP	660	22.648	20.266	71.333	1.00	36.60	A	N
ATOM	3821	CA	ASP	660	23.083	19.882	72.675	1.00	39.20	A	C
ATOM	3822	CB	ASP	660	22.950	18.367	72.890	1.00	43.10	A	C
ATOM	3823	CG	ASP	660	21.715	17.989	73.695	1.00	50.28	A	C
ATOM	3824	OD1	ASP	660	21.273	18.796	74.551	1.00	52.61	A	O
ATOM	3825	OD2	ASP	660	21.190	16.869	73.481	1.00	53.05	A	O
ATOM	3826	C	ASP	660	24.531	20.302	72.896	1.00	37.79	A	C
ATOM	3827	O	ASP	660	24.891	20.759	73.981	1.00	37.04	A	O
ATOM	3828	N	ALA	661	25.354	20.133	71.863	1.00	35.62	A	N
ATOM	3829	CA	ALA	661	26.763	20.502	71.932	1.00	37.48	A	C
ATOM	3830	CB	ALA	661	27.505	19.985	70.722	1.00	34.29	A	C
ATOM	3831	C	ALA	661	26.929	22.016	72.050	1.00	38.99	A	C
ATOM	3832	O	ALA	661	27.913	22.489	72.612	1.00	41.62	A	O
ATOM	3833	N	ARG	662	25.957	22.766	71.534	1.00	39.64	A	N
ATOM	3834	CA	ARG	662	25.990	24.224	71.596	1.00	43.42	A	C
ATOM	3835	CB	ARG	662	24.934	24.828	70.670	1.00	45.44	A	C
ATOM	3836	CG	ARG	662	25.235	24.689	69.190	1.00	50.70	A	C
ATOM	3837	CD	ARG	662	26.161	25.789	68.691	1.00	55.26	A	C
ATOM	3838	NE	ARG	662	26.434	25.661	67.261	1.00	57.80	A	N
ATOM	3839	CZ	ARG	662	25.507	25.706	66.308	1.00	59.27	A	C
ATOM	3840	NH1	ARG	662	24.229	25.884	66.627	1.00	59.47	A	N
ATOM	3841	NH2	ARG	662	25.853	25.539	65.034	1.00	58.21	A	N
ATOM	3842	C	ARG	662	25.759	24.718	73.020	1.00	45.05	A	C
ATOM	3843	O	ARG	662	26.339	25.720	73.431	1.00	44.62	A	O
ATOM	3844	N	ARG	663	24.883	24.035	73.757	1.00	46.76	A	N
ATOM	3845	CA	ARG	663	24.599	24.408	75.139	1.00	48.73	A	C
ATOM	3846	CB	ARG	663	23.346	23.701	75.649	1.00	49.47	A	C
ATOM	3847	CG	ARG	663	22.102	24.079	74.893	1.00	48.31	A	C
ATOM	3848	CD	ARG	663	20.898	23.279	75.342	1.00	46.48	A	C
ATOM	3849	NE	ARG	663	19.791	23.503	74.420	1.00	49.18	A	N
ATOM	3850	CZ	ARG	663	19.373	22.614	73.525	1.00	48.80	A	C
ATOM	3851	NH1	ARG	663	19.959	21.428	73.441	1.00	48.69	A	N
ATOM	3852	NH2	ARG	663	18.408	22.935	72.674	1.00	50.28	A	N
ATOM	3853	C	ARG	663	25.794	24.061	76.019	1.00	50.98	A	C
ATOM	3854	O	ARG	663	26.091	24.778	76.975	1.00	51.14	A	O
ATOM	3855	N	ASP	664	26.473	22.962	75.689	1.00	52.76	A	N
ATOM	3856	CA	ASP	664	27.657	22.535	76.429	1.00	55.49	A	C
ATOM	3857	CB	ASP	664	28.230	21.236	75.845	1.00	59.79	A	C
ATOM	3858	CG	ASP	664	27.843	19.995	76.648	1.00	64.00	A	C
ATOM	3859	OD1	ASP	664	27.508	20.115	77.851	1.00	66.85	A	O
ATOM	3860	OD2	ASP	664	27.899	18.886	76.071	1.00	65.62	A	O
ATOM	3861	C	ASP	664	28.713	23.630	76.330	1.00	55.91	A	C
ATOM	3862	O	ASP	664	29.274	24.048	77.342	1.00	56.13	A	O
ATOM	3863	N	LEU	665	28.955	24.097	75.104	1.00	55.07	A	N
ATOM	3864	CA	LEU	665	29.933	25.151	74.832	1.00	54.96	A	C
ATOM	3865	CB	LEU	665	30.142	25.306	73.322	1.00	54.26	A	C
ATOM	3866	CG	LEU	665	31.133	26.365	72.818	1.00	52.97	A	C
ATOM	3867	CD1	LEU	665	32.544	26.044	73.285	1.00	52.06	A	C
ATOM	3868	CD2	LEU	665	31.084	26.427	71.299	1.00	52.13	A	C
ATOM	3869	C	LEU	665	29.476	26.474	75.433	1.00	55.37	A	C
ATOM	3870	O	LEU	665	30.282	27.227	75.974	1.00	55.04	A	O
ATOM	3871	N	LYS	666	28.177	26.743	75.329	1.00	56.70	A	N
ATOM	3872	CA	LYS	666	27.568	27.954	75.869	1.00	57.85	A	C
ATOM	3873	CB	LYS	666	26.071	27.970	75.524	1.00	59.36	A	C
ATOM	3874	CG	LYS	666	25.186	28.868	76.382	1.00	62.64	A	C
ATOM	3875	CD	LYS	666	25.380	30.343	76.090	1.00	65.58	A	C
ATOM	3876	CE	LYS	666	24.459	31.184	76.975	1.00	67.42	A	C
ATOM	3877	NZ	LYS	666	24.610	32.653	76.750	1.00	67.30	A	N
ATOM	3878	C	LYS	666	27.781	28.037	77.385	1.00	58.23	A	C
ATOM	3879	O	LYS	666	28.061	29.114	77.912	1.00	58.32	A	O
ATOM	3880	N	SER	667	27.662	26.903	78.077	1.00	58.34	A	N
ATOM	3881	CA	SER	667	27.857	26.876	79.528	1.00	59.07	A	C
ATOM	3882	CB	SER	667	27.060	25.740	80.188	1.00	59.03	A	C

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ATOM	3883	OG	SER	667	27.731	24.495	80.091	1.00	59.00	A	O
ATOM	3884	C	SER	667	29.338	26.753	79.875	1.00	59.64	A	C
ATOM	3885	O	SER	667	29.760	27.154	80.959	1.00	59.77	A	O
ATOM	3886	N	ALA	668	30.120	26.179	78.964	1.00	60.12	A	N
ATOM	3887	CA	ALA	668	31.559	26.033	79.174	1.00	61.74	A	C
ATOM	3888	CB	ALA	668	32.164	25.114	78.122	1.00	61.79	A	C
ATOM	3889	C	ALA	668	32.220	27.414	79.120	1.00	62.68	A	C
ATOM	3890	O	ALA	668	33.177	27.677	79.848	1.00	62.42	A	O
ATOM	3891	N	LYS	669	31.698	28.282	78.251	1.00	63.32	A	N
ATOM	3892	CA	LYS	669	32.201	29.648	78.093	1.00	64.67	A	C
ATOM	3893	CB	LYS	669	31.600	30.313	76.849	1.00	64.70	A	C
ATOM	3894	CG	LYS	669	32.198	29.877	75.526	1.00	63.94	A	C
ATOM	3895	CD	LYS	669	31.605	30.694	74.389	1.00	65.44	A	C
ATOM	3896	CE	LYS	669	32.225	30.328	73.050	1.00	67.03	A	C
ATOM	3897	NZ	LYS	669	31.638	31.119	71.931	1.00	66.79	A	N
ATOM	3898	C	LYS	669	31.841	30.480	79.319	1.00	65.88	A	C
ATOM	3899	O	LYS	669	32.629	31.317	79.771	1.00	64.32	A	O
ATOM	3900	N	ALA	670	30.630	30.259	79.830	1.00	67.44	A	N
ATOM	3901	CA	ALA	670	30.144	30.965	81.008	1.00	69.15	A	C
ATOM	3902	CB	ALA	670	28.682	30.621	81.267	1.00	67.59	A	C
ATOM	3903	C	ALA	670	30.999	30.595	82.216	1.00	70.38	A	C
ATOM	3904	O	ALA	670	31.305	31.446	83.052	1.00	70.40	A	O
ATOM	3905	N	ASP	671	31.403	29.328	82.281	1.00	72.05	A	N
ATOM	3906	CA	ASP	671	32.228	28.841	83.381	1.00	75.02	A	C
ATOM	3907	CB	ASP	671	32.138	27.311	83.488	1.00	75.36	A	C
ATOM	3908	CG	ASP	671	32.371	26.801	84.915	1.00	77.17	A	C
ATOM	3909	OD1	ASP	671	31.788	27.372	85.866	1.00	76.71	A	O
ATOM	3910	OD2	ASP	671	33.122	25.814	85.084	1.00	76.86	A	O
ATOM	3911	C	ASP	671	33.683	29.287	83.205	1.00	75.98	A	C
ATOM	3912	O	ASP	671	34.464	29.263	84.156	1.00	75.90	A	O
ATOM	3913	N	ALA	672	34.037	29.698	81.989	1.00	77.44	A	N
ATOM	3914	CA	ALA	672	35.390	30.164	81.692	1.00	79.19	A	C
ATOM	3915	CB	ALA	672	35.647	30.129	80.193	1.00	78.38	A	C
ATOM	3916	C	ALA	672	35.592	31.578	82.234	1.00	80.74	A	C
ATOM	3917	O	ALA	672	36.710	31.962	82.577	1.00	81.01	A	O
ATOM	3918	N	LYS	673	34.504	32.344	82.302	1.00	82.89	A	N
ATOM	3919	CA	LYS	673	34.538	33.713	82.814	1.00	85.51	A	C
ATOM	3920	CB	LYS	673	33.197	34.416	82.572	1.00	85.65	A	C
ATOM	3921	CG	LYS	673	32.831	34.583	81.107	1.00	86.59	A	C
ATOM	3922	CD	LYS	673	33.854	35.436	80.372	1.00	87.03	A	C
ATOM	3923	CE	LYS	673	33.519	35.541	78.893	1.00	87.91	A	C
ATOM	3924	NZ	LYS	673	34.531	36.344	78.150	1.00	88.49	A	N
ATOM	3925	C	LYS	673	34.845	33.682	84.307	1.00	87.15	A	C
ATOM	3926	O	LYS	673	35.807	34.305	84.761	1.00	87.31	A	O
ATOM	3927	N	VAL	674	34.016	32.966	85.064	1.00	88.97	A	N
ATOM	3928	CA	VAL	674	34.220	32.831	86.501	1.00	91.16	A	C
ATOM	3929	CB	VAL	674	32.972	32.250	87.223	1.00	91.57	A	C
ATOM	3930	CG1	VAL	674	31.870	33.297	87.286	1.00	91.81	A	C
ATOM	3931	CG2	VAL	674	32.468	30.999	86.512	1.00	91.27	A	C
ATOM	3932	C	VAL	674	35.429	31.929	86.728	1.00	92.28	A	C
ATOM	3933	O	VAL	674	35.431	30.763	86.333	1.00	92.16	A	O
ATOM	3934	N	MET	675	36.473	32.503	87.320	1.00	94.19	A	N
ATOM	3935	CA	MET	675	37.721	31.793	87.598	1.00	95.68	A	C
ATOM	3936	CB	MET	675	37.458	30.560	88.473	1.00	97.06	A	C
ATOM	3937	CG	MET	675	38.634	30.146	89.340	1.00	98.03	A	C
ATOM	3938	SD	MET	675	38.126	29.004	90.638	1.00	100.18	A	S
ATOM	3939	CE	MET	675	37.409	30.145	91.842	1.00	97.94	A	C
ATOM	3940	C	MET	675	38.383	31.410	86.274	1.00	95.45	A	C
ATOM	3941	O	MET	675	38.454	30.235	85.904	1.00	95.32	A	O
ATOM	3942	N	LYS	676	38.827	32.437	85.553	1.00	95.43	A	N
ATOM	3943	CA	LYS	676	39.479	32.286	84.259	1.00	95.38	A	C
ATOM	3944	CB	LYS	676	39.597	33.660	83.582	1.00	96.43	A	C
ATOM	3945	CG	LYS	676	40.452	33.699	82.316	1.00	98.41	A	C
ATOM	3946	CD	LYS	676	39.867	32.855	81.190	1.00	99.57	A	C
ATOM	3947	CE	LYS	676	40.764	32.894	79.960	1.00	100.49	A	C
ATOM	3948	NZ	LYS	676	40.217	32.082	78.837	1.00	101.09	A	N
ATOM	3949	C	LYS	676	40.852	31.623	84.362	1.00	94.93	A	C
ATOM	3950	O	LYS	676	41.805	32.219	84.868	1.00	95.15	A	O
ATOM	3951	N	ASP	677	40.940	30.385	83.882	1.00	94.35	A	N
ATOM	3952	CA	ASP	677	42.193	29.636	83.895	1.00	93.95	A	C
ATOM	3953	CB	ASP	677	42.322	28.790	85.170	1.00	94.21	A	C
ATOM	3954	CG	ASP	677	41.103	27.926	85.433	1.00	94.68	A	C
ATOM	3955	OD1	ASP	677	40.412	28.173	86.443	1.00	95.14	A	O
ATOM	3956	OD2	ASP	677	40.843	26.995	84.645	1.00	94.38	A	O
ATOM	3957	C	ASP	677	42.354	28.770	82.644	1.00	93.80	A	C
ATOM	3958	O	ASP	677	41.397	28.558	81.895	1.00	93.49	A	O

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ATOM	3959	N	ALA	678	43.573	28.279	82.429	1.00	93.20	A	N
ATOM	3960	CA	ALA	678	43.901	27.449	81.271	1.00	92.15	A	C
ATOM	3961	CB	ALA	678	45.411	27.387	81.092	1.00	92.40	A	C
ATOM	3962	C	ALA	678	43.316	26.036	81.302	1.00	91.44	A	C
ATOM	3963	O	ALA	678	43.377	25.315	80.304	1.00	91.38	A	O
ATOM	3964	N	LYS	679	42.767	25.637	82.446	1.00	90.46	A	N
ATOM	3965	CA	LYS	679	42.169	24.311	82.590	1.00	89.31	A	C
ATOM	3966	CB	LYS	679	42.146	23.900	84.066	1.00	89.67	A	C
ATOM	3967	CG	LYS	679	42.512	22.444	84.327	1.00	90.29	A	C
ATOM	3968	CD	LYS	679	41.499	21.480	83.729	1.00	90.48	A	C
ATOM	3969	CE	LYS	679	41.882	20.035	84.007	1.00	90.36	A	C
ATOM	3970	NZ	LYS	679	40.870	19.089	83.463	1.00	90.11	A	N
ATOM	3971	C	LYS	679	40.749	24.325	82.012	1.00	88.37	A	C
ATOM	3972	O	LYS	679	40.337	23.385	81.325	1.00	87.95	A	O
ATOM	3973	N	THR	680	40.013	25.399	82.294	1.00	86.56	A	N
ATOM	3974	CA	THR	680	38.649	25.564	81.797	1.00	84.87	A	C
ATOM	3975	CB	THR	680	37.882	26.652	82.585	1.00	84.80	A	C
ATOM	3976	OG1	THR	680	38.009	26.406	83.988	1.00	85.46	A	O
ATOM	3977	CG2	THR	680	36.400	26.633	82.224	1.00	85.07	A	C
ATOM	3978	C	THR	680	38.704	25.974	80.325	1.00	83.56	A	C
ATOM	3979	O	THR	680	37.746	25.775	79.577	1.00	83.51	A	O
ATOM	3980	N	LYS	681	39.834	26.553	79.924	1.00	81.65	A	N
ATOM	3981	CA	LYS	681	40.040	26.990	78.549	1.00	79.99	A	C
ATOM	3982	CB	LYS	681	41.303	27.847	78.451	1.00	80.40	A	C
ATOM	3983	CG	LYS	681	41.573	28.428	77.070	1.00	81.69	A	C
ATOM	3984	CD	LYS	681	42.811	29.311	77.086	1.00	82.33	A	C
ATOM	3985	CE	LYS	681	44.037	28.527	77.528	1.00	82.45	A	C
ATOM	3986	NZ	LYS	681	45.210	29.413	77.750	1.00	82.74	A	N
ATOM	3987	C	LYS	681	40.144	25.783	77.622	1.00	78.22	A	C
ATOM	3988	O	LYS	681	39.631	25.808	76.503	1.00	77.66	A	O
ATOM	3989	N	LYS	682	40.806	24.727	78.093	1.00	76.97	A	N
ATOM	3990	CA	LYS	682	40.951	23.509	77.305	1.00	75.93	A	C
ATOM	3991	CB	LYS	682	42.018	22.583	77.899	1.00	77.51	A	C
ATOM	3992	CG	LYS	682	43.441	22.964	77.497	1.00	80.30	A	C
ATOM	3993	CD	LYS	682	43.592	22.987	75.971	1.00	81.85	A	C
ATOM	3994	CE	LYS	682	44.915	23.609	75.522	1.00	82.49	A	C
ATOM	3995	NZ	LYS	682	46.110	22.811	75.922	1.00	82.34	A	N
ATOM	3996	C	LYS	682	39.620	22.783	77.172	1.00	74.02	A	C
ATOM	3997	O	LYS	682	39.430	21.986	76.254	1.00	74.38	A	O
ATOM	3998	N	VAL	683	38.704	23.057	78.097	1.00	71.46	A	N
ATOM	3999	CA	VAL	683	37.379	22.451	78.052	1.00	68.56	A	C
ATOM	4000	CB	VAL	683	36.645	22.567	79.407	1.00	68.68	A	C
ATOM	4001	CG1	VAL	683	35.243	21.977	79.305	1.00	67.08	A	C
ATOM	4002	CG2	VAL	683	37.438	21.846	80.488	1.00	68.17	A	C
ATOM	4003	C	VAL	683	36.586	23.156	76.954	1.00	66.34	A	C
ATOM	4004	O	VAL	683	35.908	22.507	76.166	1.00	65.49	A	O
ATOM	4005	N	VAL	684	36.711	24.480	76.888	1.00	64.89	A	N
ATOM	4006	CA	VAL	684	36.029	25.280	75.870	1.00	64.96	A	C
ATOM	4007	CB	VAL	684	36.266	26.798	76.091	1.00	65.36	A	C
ATOM	4008	CG1	VAL	684	35.629	27.614	74.971	1.00	65.15	A	C
ATOM	4009	CG2	VAL	684	35.693	27.228	77.434	1.00	66.16	A	C
ATOM	4010	C	VAL	684	36.555	24.870	74.490	1.00	65.09	A	C
ATOM	4011	O	VAL	684	35.827	24.901	73.495	1.00	64.31	A	O
ATOM	4012	N	GLU	685	37.823	24.469	74.456	1.00	65.17	A	N
ATOM	4013	CA	GLU	685	38.477	24.023	73.233	1.00	64.81	A	C
ATOM	4014	CB	GLU	685	39.990	23.888	73.478	1.00	66.80	A	C
ATOM	4015	CG	GLU	685	40.803	23.218	72.356	1.00	69.65	A	C
ATOM	4016	CD	GLU	685	40.783	21.689	72.410	1.00	71.16	A	C
ATOM	4017	OE1	GLU	685	40.832	21.118	73.526	1.00	70.84	A	O
ATOM	4018	OE2	GLU	685	40.718	21.058	71.330	1.00	71.23	A	O
ATOM	4019	C	GLU	685	37.879	22.687	72.797	1.00	63.12	A	C
ATOM	4020	O	GLU	685	37.443	22.535	71.655	1.00	63.86	A	O
ATOM	4021	N	SER	686	37.848	21.733	73.725	1.00	61.58	A	N
ATOM	4022	CA	SER	686	37.318	20.399	73.464	1.00	60.24	A	C
ATOM	4023	CB	SER	686	37.623	19.466	74.638	1.00	61.52	A	C
ATOM	4024	OG	SER	686	37.036	19.940	75.837	1.00	62.78	A	O
ATOM	4025	C	SER	686	35.823	20.391	73.165	1.00	58.65	A	C
ATOM	4026	O	SER	686	35.301	19.414	72.630	1.00	58.15	A	O
ATOM	4027	N	LYS	687	35.134	21.467	73.539	1.00	57.33	A	N
ATOM	4028	CA	LYS	687	33.701	21.583	73.286	1.00	57.18	A	C
ATOM	4029	CB	LYS	687	33.021	22.486	74.321	1.00	57.33	A	C
ATOM	4030	CG	LYS	687	33.034	21.948	75.745	1.00	57.90	A	C
ATOM	4031	CD	LYS	687	32.375	20.584	75.854	1.00	58.20	A	C
ATOM	4032	CE	LYS	687	32.433	20.071	77.285	1.00	60.90	A	C
ATOM	4033	NZ	LYS	687	31.762	18.755	77.440	1.00	61.09	A	N
ATOM	4034	C	LYS	687	33.492	22.151	71.892	1.00	56.23	A	C

ATOM	4035	O	LYS	687	32.571	21.753	71.185	1.00	55.42	A	O
ATOM	4036	N	LYS	688	34.358	23.085	71.509	1.00	55.56	A	N
ATOM	4037	CA	LYS	688	34.293	23.701	70.191	1.00	55.97	A	C
ATOM	4038	CB	LYS	688	35.345	24.807	70.073	1.00	57.75	A	C
ATOM	4039	CG	LYS	688	35.471	25.379	68.617	1.00	62.46	A	C
ATOM	4040	CD	LYS	688	36.619	26.377	68.546	1.00	65.64	A	C
ATOM	4041	CE	LYS	688	36.863	26.773	67.091	1.00	66.85	A	C
ATOM	4042	NZ	LYS	688	37.973	27.758	66.949	1.00	66.30	A	N
ATOM	4043	C	LYS	688	34.540	22.620	69.146	1.00	54.21	A	C
ATOM	4044	O	LYS	688	33.869	22.574	68.119	1.00	51.78	A	O
ATOM	4045	N	LYS	689	35.497	21.744	69.441	1.00	54.90	A	N
ATOM	4046	CA	LYS	689	35.861	20.639	68.560	1.00	55.60	A	C
ATOM	4047	CB	LYS	689	37.025	19.852	69.160	1.00	57.82	A	C
ATOM	4048	CG	LYS	689	38.400	20.393	68.802	1.00	61.57	A	C
ATOM	4049	CD	LYS	689	39.055	19.564	67.703	1.00	62.90	A	C
ATOM	4050	CE	LYS	689	39.332	18.137	68.177	1.00	64.37	A	C
ATOM	4051	NZ	LYS	689	40.021	17.311	67.144	1.00	63.69	A	N
ATOM	4052	C	LYS	689	34.683	19.704	68.344	1.00	55.22	A	C
ATOM	4053	O	LYS	689	34.448	19.232	67.229	1.00	55.29	A	O
ATOM	4054	N	ALA	690	33.956	19.435	69.425	1.00	54.06	A	N
ATOM	4055	CA	ALA	690	32.792	18.557	69.379	1.00	52.94	A	C
ATOM	4056	CB	ALA	690	32.319	18.231	70.789	1.00	51.97	A	C
ATOM	4057	C	ALA	690	31.670	19.205	68.573	1.00	51.58	A	C
ATOM	4058	O	ALA	690	30.865	18.513	67.952	1.00	51.69	A	O
ATOM	4059	N	VAL	691	31.614	20.533	68.595	1.00	50.33	A	N
ATOM	4060	CA	VAL	691	30.598	21.253	67.836	1.00	50.44	A	C
ATOM	4061	CB	VAL	691	30.459	22.726	68.301	1.00	49.73	A	C
ATOM	4062	CG1	VAL	691	29.472	23.476	67.419	1.00	46.96	A	C
ATOM	4063	CG2	VAL	691	29.993	22.778	69.741	1.00	48.80	A	C
ATOM	4064	C	VAL	691	30.984	21.199	66.356	1.00	51.58	A	C
ATOM	4065	O	VAL	691	30.119	21.092	65.491	1.00	50.74	A	O
ATOM	4066	N	GLN	692	32.290	21.217	66.084	1.00	52.72	A	N
ATOM	4067	CA	GLN	692	32.812	21.161	64.718	1.00	54.19	A	C
ATOM	4068	CB	GLN	692	34.331	21.343	64.699	1.00	57.88	A	C
ATOM	4069	CG	GLN	692	34.822	22.772	64.798	1.00	63.85	A	C
ATOM	4070	CD	GLN	692	36.303	22.875	64.472	1.00	67.45	A	C
ATOM	4071	OE1	GLN	692	36.681	23.108	63.320	1.00	66.92	A	O
ATOM	4072	NE2	GLN	692	37.151	22.669	65.480	1.00	68.96	A	N
ATOM	4073	C	GLN	692	32.484	19.857	64.007	1.00	52.26	A	C
ATOM	4074	O	GLN	692	31.985	19.873	62.882	1.00	51.82	A	O
ATOM	4075	N	ARG	693	32.809	18.734	64.647	1.00	50.33	A	N
ATOM	4076	CA	ARG	693	32.551	17.415	64.075	1.00	49.66	A	C
ATOM	4077	CB	ARG	693	33.016	16.307	65.022	1.00	52.65	A	C
ATOM	4078	CG	ARG	693	34.517	16.279	65.268	1.00	59.11	A	C
ATOM	4079	CD	ARG	693	34.938	15.073	66.104	1.00	63.31	A	C
ATOM	4080	NE	ARG	693	34.396	15.108	67.463	1.00	67.98	A	N
ATOM	4081	CZ	ARG	693	33.296	14.466	67.856	1.00	70.30	A	C
ATOM	4082	NH1	ARG	693	32.604	13.727	66.993	1.00	71.58	A	N
ATOM	4083	NH2	ARG	693	32.882	14.569	69.112	1.00	69.23	A	N
ATOM	4084	C	ARG	693	31.074	17.223	63.762	1.00	47.90	A	C
ATOM	4085	O	ARG	693	30.720	16.688	62.709	1.00	48.64	A	O
ATOM	4086	N	LEU	694	30.218	17.666	64.681	1.00	44.71	A	N
ATOM	4087	CA	LEU	694	28.776	17.544	64.508	1.00	42.08	A	C
ATOM	4088	CB	LEU	694	28.054	17.910	65.804	1.00	40.96	A	C
ATOM	4089	CG	LEU	694	28.224	16.896	66.940	1.00	41.29	A	C
ATOM	4090	CD1	LEU	694	27.896	17.537	68.269	1.00	41.24	A	C
ATOM	4091	CD2	LEU	694	27.347	15.680	66.699	1.00	39.75	A	C
ATOM	4092	C	LEU	694	28.272	18.387	63.342	1.00	41.81	A	C
ATOM	4093	O	LEU	694	27.380	17.958	62.605	1.00	40.09	A	O
ATOM	4094	N	GLU	695	28.866	19.566	63.155	1.00	41.23	A	N
ATOM	4095	CA	GLU	695	28.483	20.456	62.057	1.00	42.43	A	C
ATOM	4096	CB	GLU	695	29.164	21.827	62.182	1.00	45.56	A	C
ATOM	4097	CG	GLU	695	28.676	22.661	63.370	1.00	52.62	A	C
ATOM	4098	CD	GLU	695	29.346	24.033	63.483	1.00	57.49	A	C
ATOM	4099	OE1	GLU	695	28.881	24.852	64.310	1.00	59.05	A	O
ATOM	4100	OE2	GLU	695	30.330	24.299	62.754	1.00	59.82	A	O
ATOM	4101	C	GLU	695	28.842	19.803	60.727	1.00	40.91	A	C
ATOM	4102	O	GLU	695	28.078	19.888	59.771	1.00	40.38	A	O
ATOM	4103	N	GLU	696	29.995	19.138	60.679	1.00	41.42	A	N
ATOM	4104	CA	GLU	696	30.435	18.443	59.470	1.00	42.34	A	C
ATOM	4105	CB	GLU	696	31.858	17.922	59.616	1.00	44.18	A	C
ATOM	4106	CG	GLU	696	32.933	18.984	59.558	1.00	50.94	A	C
ATOM	4107	CD	GLU	696	34.338	18.399	59.651	1.00	55.00	A	C
ATOM	4108	OE1	GLU	696	34.525	17.208	59.301	1.00	56.45	A	O
ATOM	4109	OE2	GLU	696	35.258	19.133	60.079	1.00	56.20	A	O
ATOM	4110	C	GLU	696	29.516	17.268	59.174	1.00	41.48	A	C

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ATOM	4111	O	GLU	696	29.138	17.059	58.022	1.00	42.99	A	O
ATOM	4112	N	GLN	697	29.179	16.490	60.207	1.00	39.17	A	N
ATOM	4113	CA	GLN	697	28.285	15.338	60.042	1.00	39.04	A	C
ATOM	4114	CB	GLN	697	28.018	14.637	61.377	1.00	39.51	A	C
ATOM	4115	CG	GLN	697	29.148	13.782	61.923	1.00	44.30	A	C
ATOM	4116	CD	GLN	697	28.762	13.107	63.237	1.00	48.02	A	C
ATOM	4117	OE1	GLN	697	28.972	13.656	64.321	1.00	49.22	A	O
ATOM	4118	NE2	GLN	697	28.168	11.925	63.141	1.00	51.24	A	N
ATOM	4119	C	GLN	697	26.953	15.816	59.474	1.00	37.83	A	C
ATOM	4120	O	GLN	697	26.430	15.238	58.517	1.00	37.59	A	O
ATOM	4121	N	LEU	698	26.422	16.885	60.068	1.00	35.32	A	N
ATOM	4122	CA	LEU	698	25.160	17.462	59.635	1.00	34.36	A	C
ATOM	4123	CB	LEU	698	24.774	18.639	60.534	1.00	30.79	A	C
ATOM	4124	CG	LEU	698	23.446	19.311	60.185	1.00	31.25	A	C
ATOM	4125	CD1	LEU	698	22.319	18.302	60.249	1.00	26.53	A	C
ATOM	4126	CD2	LEU	698	23.184	20.502	61.104	1.00	28.39	A	C
ATOM	4127	C	LEU	698	25.280	17.910	58.180	1.00	35.77	A	C
ATOM	4128	O	LEU	698	24.443	17.558	57.347	1.00	35.34	A	O
ATOM	4129	N	MET	699	26.346	18.651	57.879	1.00	36.00	A	N
ATOM	4130	CA	MET	699	26.617	19.144	56.529	1.00	37.35	A	C
ATOM	4131	CB	MET	699	27.972	19.857	56.498	1.00	41.13	A	C
ATOM	4132	CG	MET	699	27.916	21.375	56.428	1.00	45.50	A	C
ATOM	4133	SD	MET	699	26.735	22.178	57.531	1.00	52.91	A	S
ATOM	4134	CE	MET	699	25.456	22.596	56.407	1.00	45.64	A	C
ATOM	4135	C	MET	699	26.627	17.990	55.526	1.00	36.95	A	C
ATOM	4136	O	MET	699	26.064	18.091	54.435	1.00	36.72	A	O
ATOM	4137	N	LYS	700	27.257	16.888	55.919	1.00	35.44	A	N
ATOM	4138	CA	LYS	700	27.349	15.701	55.078	1.00	35.10	A	C
ATOM	4139	CB	LYS	700	28.276	14.684	55.744	1.00	36.33	A	C
ATOM	4140	CG	LYS	700	28.637	13.485	54.898	1.00	40.21	A	C
ATOM	4141	CD	LYS	700	29.689	12.636	55.604	1.00	38.79	A	C
ATOM	4142	CE	LYS	700	30.071	11.432	54.766	1.00	43.68	A	C
ATOM	4143	NZ	LYS	700	31.168	10.656	55.402	1.00	45.73	A	N
ATOM	4144	C	LYS	700	25.965	15.095	54.816	1.00	34.92	A	C
ATOM	4145	O	LYS	700	25.655	14.722	53.688	1.00	34.41	A	O
ATOM	4146	N	LEU	701	25.124	15.032	55.848	1.00	34.11	A	N
ATOM	4147	CA	LEU	701	23.773	14.484	55.700	1.00	33.53	A	C
ATOM	4148	CB	LEU	701	23.099	14.294	57.060	1.00	31.93	A	C
ATOM	4149	CG	LEU	701	23.737	13.333	58.066	1.00	34.86	A	C
ATOM	4150	CD1	LEU	701	23.063	13.499	59.432	1.00	34.87	A	C
ATOM	4151	CD2	LEU	701	23.632	11.885	57.574	1.00	32.74	A	C
ATOM	4152	C	LEU	701	22.909	15.390	54.833	1.00	34.31	A	C
ATOM	4153	O	LEU	701	22.172	14.912	53.970	1.00	34.30	A	O
ATOM	4154	N	GLU	702	23.000	16.697	55.061	1.00	34.52	A	N
ATOM	4155	CA	GLU	702	22.218	17.651	54.285	1.00	37.01	A	C
ATOM	4156	CB	GLU	702	22.343	19.057	54.866	1.00	39.64	A	C
ATOM	4157	CG	GLU	702	21.666	19.204	56.216	1.00	45.99	A	C
ATOM	4158	CD	GLU	702	21.986	20.525	56.896	1.00	50.99	A	C
ATOM	4159	OE1	GLU	702	23.180	20.773	57.182	1.00	51.33	A	O
ATOM	4160	OE2	GLU	702	21.043	21.307	57.157	1.00	53.09	A	O
ATOM	4161	C	GLU	702	22.626	17.629	52.816	1.00	36.05	A	C
ATOM	4162	O	GLU	702	21.792	17.825	51.931	1.00	37.84	A	O
ATOM	4163	N	VAL	703	23.909	17.390	52.563	1.00	33.87	A	N
ATOM	4164	CA	VAL	703	24.412	17.307	51.199	1.00	35.23	A	C
ATOM	4165	CB	VAL	703	25.956	17.351	51.173	1.00	35.04	A	C
ATOM	4166	CG1	VAL	703	26.493	16.764	49.889	1.00	36.07	A	C
ATOM	4167	CG2	VAL	703	26.427	18.792	51.313	1.00	33.30	A	C
ATOM	4168	C	VAL	703	23.863	16.028	50.544	1.00	36.42	A	C
ATOM	4169	O	VAL	703	23.452	16.049	49.385	1.00	36.61	A	O
ATOM	4170	N	GLN	704	23.815	14.935	51.302	1.00	36.97	A	N
ATOM	4171	CA	GLN	704	23.278	13.676	50.790	1.00	39.70	A	C
ATOM	4172	CB	GLN	704	23.524	12.530	51.771	1.00	42.60	A	C
ATOM	4173	CG	GLN	704	24.967	12.058	51.857	1.00	46.50	A	C
ATOM	4174	CD	GLN	704	25.213	11.168	53.071	1.00	51.47	A	C
ATOM	4175	OE1	GLN	704	26.105	11.437	53.881	1.00	54.35	A	O
ATOM	4176	NE2	GLN	704	24.408	10.114	53.213	1.00	51.22	A	N
ATOM	4177	C	GLN	704	21.780	13.818	50.539	1.00	40.89	A	C
ATOM	4178	O	GLN	704	21.238	13.191	49.628	1.00	43.38	A	O
ATOM	4179	N	ALA	705	21.115	14.646	51.344	1.00	41.26	A	N
ATOM	4180	CA	ALA	705	19.681	14.882	51.193	1.00	41.30	A	C
ATOM	4181	CB	ALA	705	19.143	15.662	52.374	1.00	43.72	A	C
ATOM	4182	C	ALA	705	19.401	15.630	49.892	1.00	41.97	A	C
ATOM	4183	O	ALA	705	18.456	15.301	49.176	1.00	44.17	A	O
ATOM	4184	N	THR	706	20.236	16.624	49.592	1.00	41.22	A	N
ATOM	4185	CA	THR	706	20.121	17.426	48.369	1.00	40.77	A	C
ATOM	4186	CB	THR	706	21.152	18.595	48.372	1.00	41.63	A	C

ATOM	4187	OG1	THR	706	20.895	19.467	49.478	1.00	42.98	A	O
ATOM	4188	CG2	THR	706	21.090	19.392	47.069	1.00	39.04	A	C
ATOM	4189	C	THR	706	20.414	16.556	47.139	1.00	40.63	A	C
ATOM	4190	O	THR	706	19.723	16.645	46.126	1.00	37.54	A	O
ATOM	4191	N	ASP	707	21.461	15.741	47.242	1.00	40.96	A	N
ATOM	4192	CA	ASP	707	21.899	14.851	46.165	1.00	44.66	A	C
ATOM	4193	CB	ASP	707	23.080	13.991	46.650	1.00	47.01	A	C
ATOM	4194	CG	ASP	707	24.040	13.582	45.523	1.00	51.81	A	C
ATOM	4195	OD1	ASP	707	25.023	12.865	45.826	1.00	52.55	A	O
ATOM	4196	OD2	ASP	707	23.837	13.979	44.350	1.00	50.37	A	O
ATOM	4197	C	ASP	707	20.753	13.956	45.685	1.00	45.47	A	C
ATOM	4198	O	ASP	707	20.496	13.867	44.487	1.00	44.21	A	O
ATOM	4199	N	ARG	708	20.058	13.324	46.631	1.00	46.67	A	N
ATOM	4200	CA	ARG	708	18.935	12.437	46.331	1.00	48.95	A	C
ATOM	4201	CB	ARG	708	18.495	11.685	47.587	1.00	51.86	A	C
ATOM	4202	CG	ARG	708	19.348	10.497	47.962	1.00	56.93	A	C
ATOM	4203	CD	ARG	708	18.644	9.706	49.056	1.00	63.08	A	C
ATOM	4204	NE	ARG	708	19.341	8.475	49.426	1.00	66.58	A	N
ATOM	4205	CZ	ARG	708	19.318	7.355	48.709	1.00	68.90	A	C
ATOM	4206	NH1	ARG	708	19.981	6.286	49.134	1.00	69.97	A	N
ATOM	4207	NH2	ARG	708	18.642	7.301	47.565	1.00	68.23	A	N
ATOM	4208	C	ARG	708	17.715	13.139	45.738	1.00	49.52	A	C
ATOM	4209	O	ARG	708	17.070	12.604	44.833	1.00	46.99	A	O
ATOM	4210	N	GLU	709	17.370	14.306	46.285	1.00	50.05	A	N
ATOM	4211	CA	GLU	709	16.217	15.072	45.808	1.00	51.08	A	C
ATOM	4212	CB	GLU	709	16.008	16.326	46.660	1.00	53.37	A	C
ATOM	4213	CG	GLU	709	15.347	16.085	48.008	1.00	59.38	A	C
ATOM	4214	CD	GLU	709	13.871	15.730	47.891	1.00	62.26	A	C
ATOM	4215	OE1	GLU	709	13.031	16.657	47.854	1.00	63.75	A	O
ATOM	4216	OE2	GLU	709	13.550	14.525	47.847	1.00	64.22	A	O
ATOM	4217	C	GLU	709	16.364	15.478	44.349	1.00	49.87	A	C
ATOM	4218	O	GLU	709	15.447	15.288	43.547	1.00	50.10	A	O
ATOM	4219	N	GLU	710	17.526	16.032	44.016	1.00	48.43	A	N
ATOM	4220	CA	GLU	710	17.821	16.487	42.659	1.00	47.74	A	C
ATOM	4221	CB	GLU	710	19.130	17.290	42.643	1.00	48.22	A	C
ATOM	4222	CG	GLU	710	19.119	18.573	43.475	1.00	52.01	A	C
ATOM	4223	CD	GLU	710	20.438	19.344	43.400	1.00	56.06	A	C
ATOM	4224	OE1	GLU	710	20.396	20.595	43.346	1.00	56.73	A	O
ATOM	4225	OE2	GLU	710	21.519	18.708	43.405	1.00	54.70	A	O
ATOM	4226	C	GLU	710	17.936	15.325	41.674	1.00	45.39	A	C
ATOM	4227	O	GLU	710	17.760	15.501	40.469	1.00	45.52	A	O
ATOM	4228	N	ASN	711	18.207	14.139	42.206	1.00	43.66	A	N
ATOM	4229	CA	ASN	711	18.389	12.934	41.411	1.00	42.79	A	C
ATOM	4230	CB	ASN	711	19.628	12.197	41.924	1.00	43.07	A	C
ATOM	4231	CG	ASN	711	20.390	11.501	40.825	1.00	45.33	A	C
ATOM	4232	OD1	ASN	711	20.957	12.150	39.948	1.00	44.25	A	O
ATOM	4233	ND2	ASN	711	20.421	10.168	40.870	1.00	46.06	A	N
ATOM	4234	C	ASN	711	17.190	11.991	41.458	1.00	42.49	A	C
ATOM	4235	O	ASN	711	17.330	10.795	41.209	1.00	43.54	A	O
ATOM	4236	N	LYS	712	16.013	12.526	41.757	1.00	42.08	A	N
ATOM	4237	CA	LYS	712	14.802	11.715	41.850	1.00	41.33	A	C
ATOM	4238	CB	LYS	712	13.674	12.527	42.498	1.00	45.20	A	C
ATOM	4239	CG	LYS	712	12.373	11.761	42.698	1.00	49.08	A	C
ATOM	4240	CD	LYS	712	11.425	12.496	43.648	1.00	53.50	A	C
ATOM	4241	CE	LYS	712	10.912	13.809	43.069	1.00	56.77	A	C
ATOM	4242	NZ	LYS	712	10.010	13.603	41.899	1.00	57.01	A	N
ATOM	4243	C	LYS	712	14.340	11.156	40.508	1.00	39.53	A	C
ATOM	4244	O	LYS	712	14.033	9.971	40.402	1.00	37.96	A	O
ATOM	4245	N	GLN	713	14.299	12.013	39.491	1.00	38.71	A	N
ATOM	4246	CA	GLN	713	13.855	11.613	38.158	1.00	39.79	A	C
ATOM	4247	CB	GLN	713	12.787	12.591	37.656	1.00	41.90	A	C
ATOM	4248	CG	GLN	713	11.458	12.493	38.397	1.00	48.02	A	C
ATOM	4249	CD	GLN	713	10.528	13.668	38.123	1.00	52.73	A	C
ATOM	4250	OE1	GLN	713	10.661	14.371	37.115	1.00	54.29	A	O
ATOM	4251	NE2	GLN	713	9.581	13.891	39.030	1.00	53.34	A	N
ATOM	4252	C	GLN	713	14.985	11.509	37.131	1.00	37.79	A	C
ATOM	4253	O	GLN	713	14.743	11.563	35.924	1.00	38.79	A	O
ATOM	4254	N	ILE	714	16.214	11.336	37.599	1.00	35.64	A	N
ATOM	4255	CA	ILE	714	17.345	11.251	36.684	1.00	35.06	A	C
ATOM	4256	CB	ILE	714	18.274	12.483	36.821	1.00	36.33	A	C
ATOM	4257	CG2	ILE	714	19.324	12.465	35.734	1.00	34.71	A	C
ATOM	4258	CG1	ILE	714	17.468	13.785	36.722	1.00	37.94	A	C
ATOM	4259	CD1	ILE	714	16.700	13.947	35.419	1.00	40.83	A	C
ATOM	4260	C	ILE	714	18.181	9.985	36.861	1.00	34.06	A	C
ATOM	4261	O	ILE	714	18.434	9.546	37.983	1.00	33.47	A	O
ATOM	4262	N	ALA	715	18.590	9.401	35.739	1.00	33.06	A	N



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ATOM	4263	CA	ALA	715	19.418	8.199	35.739	1.00	33.35	A	C
ATOM	4264	CB	ALA	715	18.838	7.168	34.776	1.00	36.14	A	C
ATOM	4265	C	ALA	715	20.827	8.593	35.307	1.00	31.87	A	C
ATOM	4266	O	ALA	715	21.043	8.957	34.150	1.00	32.25	A	O
ATOM	4267	N	LEU	716	21.783	8.524	36.230	1.00	30.27	A	N
ATOM	4268	CA	LEU	716	23.168	8.901	35.921	1.00	28.81	A	C
ATOM	4269	CB	LEU	716	23.873	9.400	37.188	1.00	29.15	A	C
ATOM	4270	CG	LEU	716	23.277	10.669	37.810	1.00	32.97	A	C
ATOM	4271	CD1	LEU	716	23.921	10.982	39.164	1.00	31.11	A	C
ATOM	4272	CD2	LEU	716	23.442	11.834	36.849	1.00	29.59	A	C
ATOM	4273	C	LEU	716	24.000	7.794	35.269	1.00	29.03	A	C
ATOM	4274	O	LEU	716	24.940	8.069	34.517	1.00	28.72	A	O
ATOM	4275	N	GLY	717	23.615	6.550	35.530	1.00	26.48	A	N
ATOM	4276	CA	GLY	717	24.335	5.400	35.016	1.00	25.20	A	C
ATOM	4277	C	GLY	717	24.800	5.361	33.567	1.00	24.43	A	C
ATOM	4278	O	GLY	717	25.997	5.176	33.316	1.00	24.79	A	O
ATOM	4279	N	THR	718	23.885	5.580	32.623	1.00	22.27	A	N
ATOM	4280	CA	THR	718	24.222	5.500	31.200	1.00	21.34	A	C
ATOM	4281	CB	THR	718	22.982	5.605	30.312	1.00	23.17	A	C
ATOM	4282	OG1	THR	718	22.086	4.539	30.643	1.00	28.21	A	O
ATOM	4283	CG2	THR	718	23.368	5.473	28.840	1.00	25.73	A	C
ATOM	4284	C	THR	718	25.279	6.467	30.726	1.00	21.98	A	C
ATOM	4285	O	THR	718	26.212	6.069	30.023	1.00	20.76	A	O
ATOM	4286	N	SER	719	25.136	7.737	31.097	1.00	19.75	A	N
ATOM	4287	CA	SER	719	26.117	8.736	30.710	1.00	19.62	A	C
ATOM	4288	CB	SER	719	25.659	10.155	31.095	1.00	17.05	A	C
ATOM	4289	OG	SER	719	25.439	10.278	32.495	1.00	20.49	A	O
ATOM	4290	C	SER	719	27.447	8.391	31.364	1.00	18.18	A	C
ATOM	4291	O	SER	719	28.467	8.348	30.707	1.00	20.08	A	O
ATOM	4292	N	LYS	720	27.406	8.044	32.641	1.00	20.18	A	N
ATOM	4293	CA	LYS	720	28.602	7.705	33.407	1.00	21.86	A	C
ATOM	4294	CB	LYS	720	28.180	7.239	34.798	1.00	24.65	A	C
ATOM	4295	CG	LYS	720	29.304	6.931	35.756	1.00	29.78	A	C
ATOM	4296	CD	LYS	720	28.727	6.467	37.088	1.00	35.56	A	C
ATOM	4297	CE	LYS	720	29.720	6.683	38.214	1.00	40.14	A	C
ATOM	4298	NZ	LYS	720	30.116	8.122	38.309	1.00	42.77	A	N
ATOM	4299	C	LYS	720	29.455	6.623	32.751	1.00	23.77	A	C
ATOM	4300	O	LYS	720	30.678	6.700	32.740	1.00	22.78	A	O
ATOM	4301	N	LEU	721	28.804	5.597	32.227	1.00	22.12	A	N
ATOM	4302	CA	LEU	721	29.520	4.505	31.605	1.00	22.41	A	C
ATOM	4303	CB	LEU	721	28.891	3.166	32.016	1.00	25.56	A	C
ATOM	4304	CG	LEU	721	29.329	2.654	33.389	1.00	27.36	A	C
ATOM	4305	CD1	LEU	721	28.157	2.595	34.325	1.00	29.74	A	C
ATOM	4306	CD2	LEU	721	29.978	1.295	33.238	1.00	27.23	A	C
ATOM	4307	C	LEU	721	29.692	4.527	30.091	1.00	21.01	A	C
ATOM	4308	O	LEU	721	30.631	3.908	29.589	1.00	21.08	A	O
ATOM	4309	N	ASN	722	28.830	5.236	29.362	1.00	15.04	A	N
ATOM	4310	CA	ASN	722	28.907	5.212	27.892	1.00	16.43	A	C
ATOM	4311	CB	ASN	722	27.588	4.712	27.339	1.00	16.60	A	C
ATOM	4312	CG	ASN	722	27.192	3.393	27.935	1.00	15.36	A	C
ATOM	4313	OD1	ASN	722	27.667	2.358	27.507	1.00	18.91	A	O
ATOM	4314	ND2	ASN	722	26.387	3.431	28.972	1.00	11.14	A	N
ATOM	4315	C	ASN	722	29.261	6.524	27.215	1.00	20.52	A	C
ATOM	4316	O	ASN	722	29.776	6.537	26.099	1.00	19.27	A	O
TER	4316	ASN		722							
ATOM	4317	N	PTR	723	28.824	7.608	27.832	1.00	20.33	A	N
ATOM	4318	CA	PTR	723	29.116	8.935	27.354	1.00	25.45	A	C
ATOM	4319	CB	PTR	723	27.813	9.773	27.347	1.00	22.49	A	C
ATOM	4320	CG	PTR	723	26.734	9.179	26.449	1.00	22.53	A	C
ATOM	4321	CD1	PTR	723	25.660	8.461	26.985	1.00	23.92	A	C
ATOM	4322	CE1	PTR	723	24.709	7.834	26.153	1.00	22.96	A	C
ATOM	4323	CD2	PTR	723	26.832	9.265	25.059	1.00	20.81	A	C
ATOM	4324	CE2	PTR	723	25.898	8.646	24.228	1.00	22.68	A	C
ATOM	4325	CZ	PTR	723	24.833	7.922	24.760	1.00	23.88	A	C
ATOM	4326	OH	PTR	723	23.985	7.292	23.869	1.00	25.68	A	O
ATOM	4327	C	PTR	723	30.105	9.355	28.438	1.00	27.28	A	C
ATOM	4328	O	PTR	723	30.331	8.614	29.373	1.00	35.06	A	O
ATOM	4329	P	PTR	723	22.705	6.390	24.200	1.00	27.39	A	P
ATOM	4330	O1P	PTR	723	21.806	7.030	25.181	1.00	26.95	A	O
ATOM	4331	O2P	PTR	723	22.107	5.844	22.958	1.00	28.22	A	O
ATOM	4332	O3P	PTR	723	23.292	5.093	24.949	1.00	25.04	A	O
ATOM	4333	N	LEU	724	30.794	10.457	28.270	1.00	23.23	A	N
ATOM	4334	CA	LEU	724	31.738	10.920	29.308	1.00	23.06	A	C
ATOM	4335	CB	LEU	724	31.099	10.909	30.713	1.00	17.44	A	C
ATOM	4336	CG	LEU	724	29.778	11.685	30.891	1.00	19.49	A	C
ATOM	4337	CD1	LEU	724	29.316	11.598	32.351	1.00	17.03	A	C



ATOM	4414	N	LYS	734	42.084	13.415	40.839	1.00	25.66	A	N
ATOM	4415	CA	LYS	734	43.484	13.621	41.193	1.00	27.03	A	C
ATOM	4416	CB	LYS	734	44.394	13.234	40.024	1.00	27.35	A	C
ATOM	4417	CG	LYS	734	44.388	11.747	39.690	1.00	30.43	A	C
ATOM	4418	CD	LYS	734	45.495	11.415	38.695	1.00	33.10	A	C
ATOM	4419	CE	LYS	734	45.465	9.945	38.282	1.00	37.23	A	C
ATOM	4420	NZ	LYS	734	45.509	9.036	39.456	1.00	37.93	A	N
ATOM	4421	C	LYS	734	43.739	15.077	41.582	1.00	27.45	A	C
ATOM	4422	O	LYS	734	44.424	15.357	42.560	1.00	30.10	A	O
ATOM	4423	N	LYS	735	43.164	15.994	40.814	1.00	26.71	A	N
ATOM	4424	CA	LYS	735	43.310	17.426	41.050	1.00	28.08	A	C
ATOM	4425	CB	LYS	735	42.617	18.191	39.917	1.00	32.14	A	C
ATOM	4426	CG	LYS	735	42.586	19.702	40.037	1.00	37.50	A	C
ATOM	4427	CD	LYS	735	41.852	20.287	38.834	1.00	41.21	A	C
ATOM	4428	CE	LYS	735	41.595	21.773	39.000	1.00	43.68	A	C
ATOM	4429	NZ	LYS	735	40.630	22.281	37.987	1.00	44.76	A	N
ATOM	4430	C	LYS	735	42.771	17.871	42.417	1.00	28.48	A	C
ATOM	4431	O	LYS	735	43.442	18.613	43.141	1.00	26.06	A	O
ATOM	4432	N	TRP	736	41.590	17.386	42.797	1.00	25.53	A	N
ATOM	4433	CA	TRP	736	41.017	17.780	44.079	1.00	24.75	A	C
ATOM	4434	CB	TRP	736	39.530	18.089	43.934	1.00	22.51	A	C
ATOM	4435	CG	TRP	736	39.285	19.224	43.024	1.00	23.11	A	C
ATOM	4436	CD2	TRP	736	39.644	20.591	43.246	1.00	23.18	A	C
ATOM	4437	CE2	TRP	736	39.279	21.311	42.089	1.00	25.46	A	C
ATOM	4438	CE3	TRP	736	40.243	21.277	44.312	1.00	28.56	A	C
ATOM	4439	CD1	TRP	736	38.726	19.171	41.783	1.00	23.56	A	C
ATOM	4440	NE1	TRP	736	38.720	20.420	41.211	1.00	27.10	A	N
ATOM	4441	CZ2	TRP	736	39.494	22.687	41.961	1.00	27.31	A	C
ATOM	4442	CZ3	TRP	736	40.455	22.647	44.189	1.00	27.36	A	C
ATOM	4443	CH2	TRP	736	40.082	23.336	43.019	1.00	31.32	A	C
ATOM	4444	C	TRP	736	41.248	16.822	45.233	1.00	27.05	A	C
ATOM	4445	O	TRP	736	40.837	17.102	46.359	1.00	28.82	A	O
ATOM	4446	N	GLY	737	41.925	15.708	44.966	1.00	28.75	A	N
ATOM	4447	CA	GLY	737	42.193	14.737	46.016	1.00	30.19	A	C
ATOM	4448	C	GLY	737	40.975	13.914	46.405	1.00	33.70	A	C
ATOM	4449	O	GLY	737	40.814	13.533	47.567	1.00	35.11	A	O
ATOM	4450	N	VAL	738	40.094	13.673	45.439	1.00	32.87	A	N
ATOM	4451	CA	VAL	738	38.898	12.879	45.678	1.00	31.77	A	C
ATOM	4452	CB	VAL	738	37.708	13.383	44.823	1.00	32.93	A	C
ATOM	4453	CG1	VAL	738	36.470	12.519	45.063	1.00	28.65	A	C
ATOM	4454	CG2									

ATOM	4490	N	ILE	743	33.827	7.837	43.258	1.00	31.93	A	N
ATOM	4491	CA	ILE	743	33.125	8.091	42.004	1.00	31.24	A	C
ATOM	4492	CB	ILE	743	33.902	9.097	41.118	1.00	31.30	A	C
ATOM	4493	CG2	ILE	743	33.081	9.454	39.887	1.00	30.78	A	C
ATOM	4494	CG1	ILE	743	34.187	10.380	41.902	1.00	30.50	A	C
ATOM	4495	CD1	ILE	743	32.923	11.088	42.377	1.00	29.47	A	C
ATOM	4496	C	ILE	743	32.838	6.817	41.203	1.00	32.69	A	C
ATOM	4497	O	ILE	743	31.736	6.639	40.684	1.00	33.86	A	O
ATOM	4498	N	TYR	744	33.833	5.943	41.090	1.00	29.59	A	N
ATOM	4499	CA	TYR	744	33.675	4.699	40.349	1.00	27.54	A	C
ATOM	4500	CB	TYR	744	34.767	4.567	39.278	1.00	26.55	A	C
ATOM	4501	CG	TYR	744	34.747	5.573	38.142	1.00	26.18	A	C
ATOM	4502	CD1	TYR	744	33.550	6.022	37.592	1.00	26.90	A	C
ATOM	4503	CE1	TYR	744	33.538	6.908	36.512	1.00	25.18	A	C
ATOM	4504	CD2	TYR	744	35.940	6.041	37.583	1.00	26.78	A	C
ATOM	4505	CE2	TYR	744	35.940	6.929	36.501	1.00	25.38	A	C
ATOM	4506	CZ	TYR	744	34.731	7.356	35.974	1.00	25.43	A	C
ATOM	4507	OH	TYR	744	34.711	8.222	34.905	1.00	24.15	A	O
ATOM	4508	C	TYR	744	33.779	3.490	41.281	1.00	28.08	A	C
ATOM	4509	O	TYR	744	34.701	3.404	42.104	1.00	25.70	A	O
ATOM	4510	N	ASN	745	32.842	2.552	41.148	1.00	27.80	A	N
ATOM	4511	CA	ASN	745	32.884	1.339	41.952	1.00	28.57	A	C
ATOM	4512	CB	ASN	745	31.493	0.686	42.064	1.00	29.92	A	C
ATOM	4513	CG	ASN	745	30.956	0.178	40.727	1.00	34.85	A	C
ATOM	4514	OD1	ASN	745	31.714	-0.120	39.799	1.00	33.12	A	O
ATOM	4515	ND2	ASN	745	29.635	0.066	40.633	1.00	35.42	A	N
ATOM	4516	C	ASN	745	33.899	0.362	41.326	1.00	30.21	A	C
ATOM	4517	O	ASN	745	34.532	0.669	40.309	1.00	27.24	A	O
ATOM	4518	N	LYS	746	34.010	-0.822	41.921	1.00	30.58	A	N
ATOM	4519	CA	LYS	746	34.930	-1.868	41.480	1.00	32.29	A	C
ATOM	4520	CB	LYS	746	34.708	-3.124	42.336	1.00	36.71	A	C
ATOM	4521	CG	LYS	746	35.417	-4.387	41.863	1.00	45.48	A	C
ATOM	4522	CD	LYS	746	34.438	-5.377	41.207	1.00	51.22	A	C
ATOM	4523	CE	LYS	746	33.396	-5.910	42.205	1.00	54.29	A	C
ATOM	4524	NZ	LYS	746	32.436	-6.866	41.570	1.00	52.03	A	N
ATOM	4525	C	LYS	746	34.871	-2.214	39.992	1.00	31.05	A	C
ATOM	4526	O	LYS	746	35.886	-2.152	39.296	1.00	29.67	A	O
ATOM	4527	N	THR	747	33.690	-2.579	39.506	1.00	29.11	A	N
ATOM	4528	CA	THR	747	33.533	-2.952	38.104	1.00	30.27	A	C
ATOM	4529	CB	THR	747	32.121	-3.564	37.822	1.00	33.05	A	C
ATOM	4530	OG1	THR	747	31.560	-2.997	36.629	1.00	35.41	A	O
ATOM	4531	CG2	THR	747	31.167	-3.337	39.001	1.00	34.44	A	C
ATOM	4532	C	THR	747	33.857	-1.796	37.151	1.00	28.16	A	C
ATOM	4533	O	THR	747	34.440	-2.001	36.083	1.00	26.47	A	O
ATOM	4534	N	GLN	748	33.509	-0.584	37.567	1.00	27.81	A	N
ATOM	4535	CA	GLN	748	33.757	0.615	36.778	1.00	27.00	A	C
ATOM	4536	CB	GLN	748	32.917	1.770	37.322	1.00	28.73	A	C
ATOM	4537	CG	GLN	748	31.425	1.599	37.052	1.00	29.61	A	C
ATOM	4538	CD	GLN	748	30.535	2.342	38.042	1.00	34.78	A	C
ATOM	4539	OE1	GLN	748	29.316	2.149	38.062	1.00	33.95	A	O
ATOM	4540	NE2	GLN	748	31.140	3.176	38.881	1.00	29.75	A	N
ATOM	4541	C	GLN	748	35.239	0.968	36.782	1.00	25.89	A	C
ATOM	4542	O	GLN	748	35.770	1.455	35.790	1.00	26.84	A	O
ATOM	4543	N	ARG	749	35.900	0.675	37.895	1.00	25.49	A	N
ATOM	4544	CA	ARG	749	37.325	0.923	38.075	1.00	26.20	A	C
ATOM	4545	CB	ARG	749	37.714	0.674	39.540	1.00	27.56	A	C
ATOM	4546	CG	ARG	749	38.442	1.844	40.195	1.00	27.26	A	C
ATOM	4547	CD	ARG	749	37.954	2.096	41.607	1.00	25.82	A	C
ATOM	4548	NE	ARG	749	38.154	0.959	42.503	1.00	28.23	A	N
ATOM	4549	CZ	ARG	749	37.249	0.539	43.384	1.00	28.29	A	C
ATOM	4550	NH1	ARG	749	36.077	1.152	43.481	1.00	26.15	A	N
ATOM	4551	NH2	ARG	749	37.528	-0.469	44.197	1.00	30.35	A	N
ATOM	4552	C	ARG	749	38.123	0.000	37.159	1.00	26.85	A	C
ATOM	4553	O	ARG	749	39.219	0.350	36.720	1.00	25.76	A	O
ATOM	4554	N	GLU	750	37.578	-1.190	36.905	1.00	23.72	A	N
ATOM	4555	CA	GLU	750	38.211	-2.169	36.024	1.00	25.35	A	C
ATOM	4556	CB	GLU	750	37.635	-3.569	36.280	1.00	30.35	A	C
ATOM	4557	CG	GLU	750	38.147	-4.225	37.565	1.00	38.90	A	C
ATOM	4558	CD	GLU	750	37.282	-5.390	38.050	1.00	46.43	A	C
ATOM	4559	OE1	GLU	750	36.379	-5.849	37.308	1.00	47.61	A	O
ATOM	4560	OE2	GLU	750	37.505	-5.842	39.197	1.00	51.20	A	O
ATOM	4561	C	GLU	750	38.005	-1.778	34.557	1.00	23.92	A	C
ATOM	4562	O	GLU	750	38.925	-1.880	33.742	1.00	23.43	A	O
ATOM	4563	N	LYS	751	36.796	-1.325	34.226	1.00	20.74	A	N
ATOM	4564	CA	LYS	751	36.486	-0.908	32.862	1.00	18.24	A	C
ATOM	4565	CB	LYS	751	35.004	-0.532	32.729	1.00	17.65	A	C

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ATOM	4566	CG	LYS	751	34.648	-0.119	31.301	1.00	21.88	A	C
ATOM	4567	CD	LYS	751	33.245	0.418	31.167	1.00	22.20	A	C
ATOM	4568	CE	LYS	751	32.975	0.793	29.718	1.00	20.50	A	C
ATOM	4569	NZ	LYS	751	31.611	1.350	29.539	1.00	21.81	A	N
ATOM	4570	C	LYS	751	37.328	0.298	32.439	1.00	18.78	A	C
ATOM	4571	O	LYS	751	37.776	0.389	31.293	1.00	16.02	A	O
ATOM	4572	N	PHE	752	37.518	1.226	33.374	1.00	16.33	A	N
ATOM	4573	CA	PHE	752	38.268	2.448	33.115	1.00	17.41	A	C
ATOM	4574	CB	PHE	752	37.516	3.635	33.729	1.00	17.66	A	C
ATOM	4575	CG	PHE	752	36.189	3.934	33.069	1.00	19.12	A	C
ATOM	4576	CD1	PHE	752	36.006	3.721	31.705	1.00	18.66	A	C
ATOM	4577	CD2	PHE	752	35.143	4.489	33.808	1.00	19.34	A	C
ATOM	4578	CE1	PHE	752	34.799	4.062	31.078	1.00	23.42	A	C
ATOM	4579	CE2	PHE	752	33.937	4.838	33.201	1.00	21.70	A	C
ATOM	4580	CZ	PHE	752	33.759	4.626	31.831	1.00	22.81	A	C
ATOM	4581	C	PHE	752	39.724	2.437	33.593	1.00	17.36	A	C
ATOM	4582	O	PHE	752	40.317	3.494	33.818	1.00	15.75	A	O
ATOM	4583	N	ALA	753	40.307	1.247	33.736	1.00	18.92	A	N
ATOM	4584	CA	ALA	753	41.691	1.132	34.193	1.00	17.80	A	C
ATOM	4585	CB	ALA	753	42.123	-0.336	34.254	1.00	18.12	A	C
ATOM	4586	C	ALA	753	42.626	1.940	33.294	1.00	17.54	A	C
ATOM	4587	O	ALA	753	43.497	2.653	33.784	1.00	19.93	A	O
ATOM	4588	N	TRP	754	42.406	1.877	31.987	1.00	16.10	A	N
ATOM	4589	CA	TRP	754	43.229	2.632	31.056	1.00	17.72	A	C
ATOM	4590	CB	TRP	754	42.777	2.408	29.611	1.00	16.35	A	C
ATOM	4591	CG	TRP	754	41.395	2.898	29.274	1.00	20.13	A	C
ATOM	4592	CD2	TRP	754	41.047	4.183	28.725	1.00	21.15	A	C
ATOM	4593	CE2	TRP	754	39.657	4.169	28.477	1.00	19.66	A	C
ATOM	4594	CE3	TRP	754	41.777	5.340	28.420	1.00	19.35	A	C
ATOM	4595	CD1	TRP	754	40.230	2.186	29.347	1.00	21.16	A	C
ATOM	4596	NE1	TRP	754	39.184	2.941	28.864	1.00	26.17	A	N
ATOM	4597	CZ2	TRP	754	38.982	5.267	27.937	1.00	18.96	A	C
ATOM	4598	CZ3	TRP	754	41.098	6.443	27.883	1.00	18.48	A	C
ATOM	4599	CH2	TRP	754	39.720	6.395	27.648	1.00	18.78	A	C
ATOM	4600	C	TRP	754	43.246	4.133	31.378	1.00	20.70	A	C
ATOM	4601	O	TRP	754	44.299	4.762	31.374	1.00	19.39	A	O
ATOM	4602	N	ALA	755	42.083	4.692	31.691	1.00	21.96	A	N
ATOM	4603	CA	ALA	755	41.986	6.116	32.000	1.00	23.47	A	C
ATOM	4604	CB	ALA	755	40.545	6.568	31.923	1.00	23.28	A	C
ATOM	4605	C	ALA	755	42.585	6.478	33.359	1.00	24.82	A	C
ATOM	4606	O	ALA	755	43.230	7.522	33.504	1.00	23.00	A	O
ATOM	4607	N	ILE	756	42.384	5.609	34.344	1.00	24.51	A	N
ATOM	4608	CA	ILE	756	42.895	5.839	35.691	1.00	27.25	A	C
ATOM	4609	CB	ILE	756	42.381	4.765	36.665	1.00	26.26	A	C
ATOM	4610	CG2	ILE	756	43.008	4.944	38.042	1.00	28.78	A	C
ATOM	4611	CG1	ILE	756	40.858	4.851	36.764	1.00	28.98	A	C
ATOM	4612	CD1	ILE	756	40.234	3.755	37.589	1.00	28.04	A	C
ATOM	4613	C	ILE	756	44.420	5.894	35.728	1.00	31.99	A	C
ATOM	4614	O	ILE	756	45.003	6.733	36.416	1.00	33.74	A	O
ATOM	4615	N	ASP	757	45.059	5.019	34.959	1.00	34.63	A	N
ATOM	4616	CA	ASP	757	46.512	4.960	34.896	1.00	38.94	A	C
ATOM	4617	CB	ASP	757	46.943	3.558	34.446	1.00	40.61	A	C
ATOM	4618	CG	ASP	757	48.444	3.432	34.273	1.00	43.83	A	C
ATOM	4619	OD1	ASP	757	48.921	3.453	33.115	1.00	44.56	A	O
ATOM	4620	OD2	ASP	757	49.147	3.312	35.299	1.00	47.23	A	O
ATOM	4621	C	ASP	757	47.107	6.009	33.950	1.00	41.87	A	C
ATOM	4622	O	ASP	757	48.109	6.649	34.264	1.00	42.92	A	O
ATOM	4623	N	MET	758	46.466	6.190	32.801	1.00	44.31	A	N
ATOM	4624	CA	MET	758	46.943	7.108	31.779	1.00	46.72	A	C
ATOM	4625	CB	MET	758	47.056	6.329	30.456	1.00	49.31	A	C
ATOM	4626	CG	MET	758	47.092	7.123	29.167	1.00	54.26	A	C
ATOM	4627	SD	MET	758	45.456	7.141	28.396	1.00	59.91	A	S
ATOM	4628	CE	MET	758	45.274	5.403	28.013	1.00	55.23	A	C
ATOM	4629	C	MET	758	46.115	8.387	31.647	1.00	47.97	A	C
ATOM	4630	O	MET	758	45.326	8.543	30.715	1.00	51.95	A	O
ATOM	4631	N	ALA	759	46.283	9.279	32.622	1.00	45.27	A	N
ATOM	4632	CA	ALA	759	45.598	10.571	32.676	1.00	43.42	A	C
ATOM	4633	CB	ALA	759	44.090	10.401	32.612	1.00	43.42	A	C
ATOM	4634	C	ALA	759	45.980	11.302	33.953	1.00	42.06	A	C
ATOM	4635	O	ALA	759	45.746	10.810	35.056	1.00	40.25	A	O
ATOM	4636	N	ASP	760	46.606	12.461	33.790	1.00	42.15	A	N
ATOM	4637	CA	ASP	760	47.027	13.281	34.920	1.00	43.65	A	C
ATOM	4638	CB	ASP	760	48.405	13.912	34.646	1.00	47.58	A	C
ATOM	4639	CG	ASP	760	48.525	14.493	33.239	1.00	51.41	A	C
ATOM	4640	OD1	ASP	760	49.563	14.249	32.587	1.00	55.00	A	O
ATOM	4641	OD2	ASP	760	47.591	15.186	32.780	1.00	54.65	A	O

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ATOM	4642	C	ASP	760	46.003	14.364	35.250	1.00	42.49	A	C
ATOM	4643	O	ASP	760	44.995	14.526	34.550	1.00	40.76	A	O
ATOM	4644	N	GLU	761	46.285	15.122	36.305	1.00	41.39	A	N
ATOM	4645	CA	GLU	761	45.406	16.199	36.751	1.00	42.64	A	C
ATOM	4646	CB	GLU	761	45.918	16.803	38.072	1.00	45.91	A	C
ATOM	4647	CG	GLU	761	47.304	17.458	38.016	1.00	51.68	A	C
ATOM	4648	CD	GLU	761	48.441	16.483	37.707	1.00	57.48	A	C
ATOM	4649	OE1	GLU	761	48.374	15.305	38.140	1.00	60.12	A	O
ATOM	4650	OE2	GLU	761	49.409	16.900	37.027	1.00	59.50	A	O
ATOM	4651	C	GLU	761	45.204	17.299	35.704	1.00	39.59	A	C
ATOM	4652	O	GLU	761	44.215	18.031	35.753	1.00	38.54	A	O
ATOM	4653	N	ASP	762	46.097	17.355	34.719	1.00	37.72	A	N
ATOM	4654	CA	ASP	762	46.026	18.368	33.673	1.00	36.15	A	C
ATOM	4655	CB	ASP	762	47.433	18.889	33.373	1.00	40.48	A	C
ATOM	4656	CG	ASP	762	48.209	19.246	34.638	1.00	43.78	A	C
ATOM	4657	OD1	ASP	762	47.655	19.963	35.506	1.00	42.11	A	O
ATOM	4658	OD2	ASP	762	49.369	18.790	34.767	1.00	46.89	A	O
ATOM	4659	C	ASP	762	45.349	17.917	32.376	1.00	35.37	A	C
ATOM	4660	O	ASP	762	45.397	18.626	31.362	1.00	34.28	A	O
ATOM	4661	N	TYR	763	44.702	16.754	32.399	1.00	31.70	A	N
ATOM	4662	CA	TYR	763	44.032	16.268	31.202	1.00	27.46	A	C
ATOM	4663	CB	TYR	763	43.463	14.865	31.404	1.00	24.24	A	C
ATOM	4664	CG	TYR	763	42.684	14.393	30.199	1.00	22.53	A	C
ATOM	4665	CD1	TYR	763	43.343	13.865	29.087	1.00	15.38	A	C
ATOM	4666	CE1	TYR	763	42.640	13.493	27.950	1.00	19.75	A	C
ATOM	4667	CD2	TYR	763	41.286	14.532	30.143	1.00	18.71	A	C
ATOM	4668	CE2	TYR	763	40.571	14.161	29.003	1.00	14.62	A	C
ATOM	4669	CZ	TYR	763	41.253	13.641	27.911	1.00	20.52	A	C
ATOM	4670	OH	TYR	763	40.563	13.260	26.775	1.00	21.31	A	O
ATOM	4671	C	TYR	763	42.910	17.201	30.774	1.00	28.13	A	C
ATOM	4672	O	TYR	763	42.105	17.643	31.591	1.00	25.34	A	O
ATOM	4673	N	GLU	764	42.887	17.521	29.487	1.00	30.26	A	N
ATOM	4674	CA	GLU	764	41.850	18.378	28.935	1.00	34.02	A	C
ATOM	4675	CB	GLU	764	42.409	19.741	28.498	1.00	35.53	A	C
ATOM	4676	CG	GLU	764	42.508	20.753	29.634	1.00	43.45	A	C
ATOM	4677	CD	GLU	764	42.635	22.192	29.147	1.00	47.25	A	C
ATOM	4678	OE1	GLU	764	41.766	22.646	28.366	1.00	46.11	A	O
ATOM	4679	OE2	GLU	764	43.602	22.872	29.558	1.00	50.44	A	O
ATOM	4680	C	GLU	764	41.205	17.686	27.755	1.00	33.88	A	C
ATOM	4681	O	GLU	764	41.884	17.313	26.796	1.00	35.46	A	O
ATOM	4682	N	PHE	765	39.899	17.472	27.846	1.00	32.94	A	N
ATOM	4683	CA	PHE	765	39.176	16.841	26.758	1.00	35.67	A	C
ATOM	4684	CB	PHE	765	37.746	16.493	27.189	1.00	32.12	A	C
ATOM	4685	CG	PHE	765	36.881	15.969	26.075	1.00	28.07	A	C
ATOM	4686	CD1	PHE	765	36.957	14.639	25.677	1.00	24.49	A	C
ATOM	4687	CD2	PHE	765	35.983	16.807	25.428	1.00	26.22	A	C
ATOM	4688	CE1	PHE	765	36.152	14.149	24.648	1.00	21.83	A	C
ATOM	4689	CE2	PHE	765	35.172	16.327	24.396	1.00	26.31	A	C
ATOM	4690	CZ	PHE	765	35.259	14.994	24.006	1.00	22.56	A	C
ATOM	4691	C	PHE	765	39.182	17.851	25.612	1.00	38.84	A	C
ATOM	4692	O	PHE	765	39.938	17.628	24.633	1.00	41.79	A	O
ATOM	4693	OXT	PHE	765	38.503	18.892	25.753	1.00	41.47	A	O
TER	4693		PHE	765							
ATOM	4694	O5'	ADE	1	23.678	4.890	-3.240	1.00	74.88	ADNA	O
ATOM	4695	N9	ADE	1	22.130	0.531	-4.364	1.00	66.55	ADNA	N
ATOM	4696	C4	ADE	1	21.767	-0.795	-4.427	1.00	64.16	ADNA	C
ATOM	4697	N3	ADE	1	20.531	-1.299	-4.588	1.00	64.38	ADNA	N
ATOM	4698	C2	ADE	1	20.567	-2.630	-4.621	1.00	63.09	ADNA	C
ATOM	4699	N1	ADE	1	21.619	-3.452	-4.522	1.00	61.98	ADNA	N
ATOM	4700	C6	ADE	1	22.847	-2.913	-4.363	1.00	61.46	ADNA	C
ATOM	4701	N6	ADE	1	23.897	-3.731	-4.277	1.00	59.44	ADNA	N
ATOM	4702	C5	ADE	1	22.943	-1.512	-4.305	1.00	62.61	ADNA	C
ATOM	4703	N7	ADE	1	24.024	-0.658	-4.144	1.00	63.48	ADNA	N
ATOM	4704	C8	ADE	1	23.491	0.536	-4.179	1.00	64.77	ADNA	C
ATOM	4705	C2'	ADE	1	20.317	1.938	-3.332	1.00	70.78	ADNA	C
ATOM	4706	C5'	ADE	1	22.447	4.367	-2.737	1.00	73.61	ADNA	C
ATOM	4707	C4'	ADE	1	21.507	3.949	-3.843	1.00	73.11	ADNA	C
ATOM	4708	O4'	ADE	1	22.086	2.849	-4.586	1.00	72.59	ADNA	O
ATOM	4709	C1'	ADE	1	21.256	1.697	-4.499	1.00	69.39	ADNA	C
ATOM	4710	C3'	ADE	1	20.152	3.448	-3.352	1.00	72.33	ADNA	C
ATOM	4711	O3'	ADE	1	19.124	3.840	-4.265	1.00	72.46	ADNA	O
ATOM	4712	P	ADE	2	17.659	4.171	-3.702	1.00	72.31	ADNA	P
ATOM	4713	O1P	ADE	2	16.705	4.153	-4.841	1.00	72.04	ADNA	O
ATOM	4714	O2P	ADE	2	17.763	5.383	-2.849	1.00	72.46	ADNA	O
ATOM	4715	O5'	ADE	2	17.346	2.922	-2.764	1.00	70.76	ADNA	O
ATOM	4716	N9	ADE	2	20.071	-0.441	-1.037	1.00	52.30	ADNA	N

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ATOM	4717	C4	ADE	2	20.695	-1.659	-1.150	1.00	47.39	ADNA	C
ATOM	4718	N3	ADE	2	20.111	-2.868	-1.232	1.00	44.27	ADNA	N
ATOM	4719	C2	ADE	2	21.030	-3.823	-1.333	1.00	44.49	ADNA	C
ATOM	4720	N1	ADE	2	22.366	-3.716	-1.358	1.00	44.87	ADNA	N
ATOM	4721	C6	ADE	2	22.919	-2.486	-1.272	1.00	42.91	ADNA	C
ATOM	4722	N6	ADE	2	24.250	-2.378	-1.299	1.00	40.14	ADNA	N
ATOM	4723	C5	ADE	2	22.051	-1.389	-1.160	1.00	45.93	ADNA	C
ATOM	4724	N7	ADE	2	22.280	-0.024	-1.053	1.00	48.32	ADNA	N
ATOM	4725	C8	ADE	2	21.077	0.493	-0.984	1.00	49.66	ADNA	C
ATOM	4726	C2'	ADE	2	18.164	1.032	-0.288	1.00	61.98	ADNA	C
ATOM	4727	C5'	ADE	2	16.850	1.700	-3.306	1.00	67.97	ADNA	C
ATOM	4728	C4'	ADE	2	16.890	0.613	-2.258	1.00	64.97	ADNA	C
ATOM	4729	O4'	ADE	2	18.132	-0.130	-2.301	1.00	61.80	ADNA	O
ATOM	4730	C1'	ADE	2	18.626	-0.235	-0.977	1.00	57.62	ADNA	C
ATOM	4731	C3'	ADE	2	16.746	1.120	-0.822	1.00	65.51	ADNA	C
ATOM	4732	O3'	ADE	2	15.933	0.213	-0.088	1.00	69.55	ADNA	O
ATOM	4733	P	ADE	3	14.367	0.504	0.071	1.00	73.32	ADNA	P
ATOM	4734	O1P	ADE	3	13.836	0.773	-1.293	1.00	72.81	ADNA	O
ATOM	4735	O2P	ADE	3	14.168	1.506	1.154	1.00	71.88	ADNA	O
ATOM	4736	O5'	ADE	3	13.795	-0.896	0.560	1.00	70.23	ADNA	O
ATOM	4737	N9	ADE	3	18.147	-3.148	1.964	1.00	47.89	ADNA	N
ATOM	4738	C4	ADE	3	19.378	-3.764	1.937	1.00	42.26	ADNA	C
ATOM	4739	N3	ADE	3	19.631	-5.079	1.833	1.00	42.51	ADNA	N
ATOM	4740	C2	ADE	3	20.945	-5.307	1.813	1.00	39.87	ADNA	C
ATOM	4741	N1	ADE	3	21.959	-4.434	1.880	1.00	37.52	ADNA	N
ATOM	4742	C6	ADE	3	21.672	-3.120	1.989	1.00	37.29	ADNA	C
ATOM	4743	N6	ADE	3	22.684	-2.253	2.055	1.00	34.19	ADNA	N
ATOM	4744	C5	ADE	3	20.313	-2.748	2.023	1.00	39.61	ADNA	C
ATOM	4745	N7	ADE	3	19.686	-1.514	2.123	1.00	42.95	ADNA	N
ATOM	4746	C8	ADE	3	18.408	-1.805	2.088	1.00	45.11	ADNA	C
ATOM	4747	C2'	ADE	3	16.098	-3.857	3.193	1.00	58.21	ADNA	C
ATOM	4748	C5'	ADE	3	14.266	-1.494	1.763	1.00	66.34	ADNA	C
ATOM	4749	C4'	ADE	3	14.656	-2.931	1.512	1.00	63.09	ADNA	C
ATOM	4750	O4'	ADE	3	16.016	-3.005	1.003	1.00	60.12	ADNA	O
ATOM	4751	C1'	ADE	3	16.834	-3.792	1.869	1.00	54.20	ADNA	C
ATOM	4752	C3'	ADE	3	14.639	-3.778	2.781	1.00	61.94	ADNA	C
ATOM	4753	O3'	ADE	3	14.088	-5.063	2.492	1.00	63.16	ADNA	O
ATOM	4754	P	ADE	4	13.874	-6.115	3.683	1.00	65.50	ADNA	P
ATOM	4755	O1P	ADE	4	12.983	-7.191	3.173	1.00	65.48	ADNA	O
ATOM	4756	O2P	ADE	4	13.506	-5.378	4.924	1.00	66.05	ADNA	O
ATOM	4757	O5'	ADE	4	15.333	-6.721	3.871	1.00	62.05	ADNA	O
ATOM	4758	N9	ADE	4	19.435	-5.991	5.015	1.00	41.27	ADNA	N
ATOM	4759	C4	ADE	4	20.760	-5.615	4.953	1.00	35.10	ADNA	C
ATOM	4760	N3	ADE	4	21.813	-6.381	4.612	1.00	35.51	ADNA	N
ATOM	4761	C2	ADE	4	22.946	-5.678	4.666	1.00	30.45	ADNA	C
ATOM	4762	N1	ADE	4	23.130	-4.391	4.992	1.00	32.16	ADNA	N
ATOM	4763	C6	ADE	4	22.050	-3.648	5.325	1.00	30.95	ADNA	C
ATOM	4764	N6	ADE	4	22.235	-2.362	5.641	1.00	33.04	ADNA	N
ATOM	4765	C5	ADE	4	20.791	-4.279	5.315	1.00	33.78	ADNA	C
ATOM	4766	N7	ADE	4	19.511	-3.819	5.611	1.00	35.88	ADNA	N
ATOM	4767	C8	ADE	4	18.748	-4.870	5.423	1.00	39.79	ADNA	C
ATOM	4768	C2'	ADE	4	17.768	-7.820	5.590	1.00	47.27	ADNA	C
ATOM	4769	C5'	ADE	4	15.981	-7.383	2.788	1.00	56.26	ADNA	C
ATOM	4770	C4'	ADE	4	17.191	-8.133	3.288	1.00	51.90	ADNA	C
ATOM	4771	O4'	ADE	4	18.338	-7.253	3.388	1.00	49.38	ADNA	O
ATOM	4772	C1'	ADE	4	18.893	-7.318	4.692	1.00	46.04	ADNA	C
ATOM	4773	C3'	ADE	4	17.000	-8.759	4.668	1.00	50.24	ADNA	C
ATOM	4774	O3'	ADE	4	17.525	-10.090	4.654	1.00	49.90	ADNA	O
ATOM	4775	P	ADE	5	17.381	-11.027	5.955	1.00	51.75	ADNA	P
ATOM	4776	O1P	ADE	5	16.906	-12.366	5.511	1.00	49.08	ADNA	O
ATOM	4777	O2P	ADE	5	16.648	-10.300	7.022	1.00	48.00	ADNA	O
ATOM	4778	O5'	ADE	5	18.892	-11.164	6.421	1.00	49.43	ADNA	O
ATOM	4779	N9	ADE	5	21.940	-7.515	8.058	1.00	28.93	ADNA	N
ATOM	4780	C4	ADE	5	22.761	-6.418	8.081	1.00	22.85	ADNA	C
ATOM	4781	N3	ADE	5	24.088	-6.390	7.876	1.00	23.14	ADNA	N
ATOM	4782	C2	ADE	5	24.552	-5.154	8.016	1.00	20.26	ADNA	C
ATOM	4783	N1	ADE	5	23.891	-4.031	8.316	1.00	21.83	ADNA	N
ATOM	4784	C6	ADE	5	22.559	-4.095	8.508	1.00	20.13	ADNA	C
ATOM	4785	N6	ADE	5	21.900	-2.966	8.807	1.00	22.85	ADNA	N
ATOM	4786	C5	ADE	5	21.945	-5.346	8.388	1.00	21.98	ADNA	C
ATOM	4787	N7	ADE	5	20.627	-5.755	8.527	1.00	24.36	ADNA	N
ATOM	4788	C8	ADE	5	20.674	-7.044	8.312	1.00	25.73	ADNA	C
ATOM	4789	C2'	ADE	5	21.622	-9.863	8.788	1.00	36.10	ADNA	C
ATOM	4790	C5'	ADE	5	19.773	-10.063	6.263	1.00	43.09	ADNA	C
ATOM	4791	C4'	ADE	5	21.194	-10.481	6.533	1.00	39.65	ADNA	C
ATOM	4792	O4'	ADE	5	21.969	-9.265	6.533	1.00	38.65	ADNA	O

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ATOM	4793	C1'	ADE	5	22.341	-8.905	7.848	1.00	33.05	ADNA	C
ATOM	4794	C3'	ADE	5	21.371	-11.079	7.921	1.00	39.58	ADNA	C
ATOM	4795	O3'	ADE	5	22.470	-11.995	7.952	1.00	40.70	ADNA	O
ATOM	4796	P	GUA	6	22.951	-12.603	9.366	1.00	42.01	ADNA	P
ATOM	4797	O1P	GUA	6	21.820	-12.416	10.319	1.00	33.66	ADNA	O
ATOM	4798	O2P	GUA	6	23.519	-13.952	9.137	1.00	38.81	ADNA	O
ATOM	4799	O5'	GUA	6	24.143	-11.642	9.794	1.00	34.85	ADNA	O
ATOM	4800	N9	GUA	6	24.772	-7.660	11.106	1.00	18.45	ADNA	N
ATOM	4801	C4	GUA	6	24.824	-6.292	11.278	1.00	14.13	ADNA	C
ATOM	4802	N3	GUA	6	25.931	-5.526	11.264	1.00	14.35	ADNA	N
ATOM	4803	C2	GUA	6	25.653	-4.244	11.466	1.00	14.42	ADNA	C
ATOM	4804	N2	GUA	6	26.635	-3.335	11.475	1.00	16.42	ADNA	N
ATOM	4805	N1	GUA	6	24.393	-3.754	11.671	1.00	16.72	ADNA	N
ATOM	4806	C6	GUA	6	23.238	-4.518	11.694	1.00	17.06	ADNA	C
ATOM	4807	O6	GUA	6	22.150	-3.973	11.900	1.00	18.80	ADNA	O
ATOM	4808	C5	GUA	6	23.517	-5.899	11.472	1.00	18.49	ADNA	C
ATOM	4809	N7	GUA	6	22.664	-6.990	11.429	1.00	16.10	ADNA	N
ATOM	4810	C8	GUA	6	23.449	-8.010	11.211	1.00	17.79	ADNA	C
ATOM	4811	C2'	GUA	6	25.998	-9.763	11.784	1.00	22.78	ADNA	C
ATOM	4812	C5'	GUA	6	25.194	-11.374	8.874	1.00	32.55	ADNA	C
ATOM	4813	C4'	GUA	6	26.221	-10.462	9.495	1.00	25.22	ADNA	C
ATOM	4814	O4'	GUA	6	25.699	-9.116	9.566	1.00	22.49	ADNA	O
ATOM	4815	C1'	GUA	6	25.893	-8.567	10.849	1.00	20.46	ADNA	C
ATOM	4816	C3'	GUA	6	26.635	-10.843	10.912	1.00	25.64	ADNA	C
ATOM	4817	O3'	GUA	6	28.062	-10.867	10.997	1.00	23.92	ADNA	O
ATOM	4818	P	ADE	7	28.769	-11.229	12.388	1.00	25.17	ADNA	P
ATOM	4819	O1P	ADE	7	30.081	-11.855	12.081	1.00	28.03	ADNA	O
ATOM	4820	O2P	ADE	7	27.796	-11.935	13.252	1.00	22.27	ADNA	O
ATOM	4821	O5'	ADE	7	29.070	-9.795	13.005	1.00	23.77	ADNA	O
ATOM	4822	N9	ADE	7	27.097	-6.318	14.652	1.00	12.68	ADNA	N
ATOM	4823	C4	ADE	7	26.408	-5.131	14.750	1.00	11.51	ADNA	C
ATOM	4824	N3	ADE	7	26.919	-3.888	14.733	1.00	8.62	ADNA	N
ATOM	4825	C2	ADE	7	25.954	-2.985	14.849	1.00	10.82	ADNA	C
ATOM	4826	N1	ADE	7	24.632	-3.167	14.963	1.00	10.16	ADNA	N
ATOM	4827	C6	ADE	7	24.149	-4.422	14.956	1.00	8.65	ADNA	C
ATOM	4828	N6	ADE	7	22.825	-4.595	15.028	1.00	7.54	ADNA	N
ATOM	4829	C5	ADE	7	25.077	-5.477	14.859	1.00	11.39	ADNA	C
ATOM	4830	N7	ADE	7	24.928	-6.858	14.859	1.00	11.91	ADNA	N
ATOM	4831	C8	ADE	7	26.150	-7.308	14.734	1.00	11.96	ADNA	C
ATOM	4832	C2'	ADE	7	29.217	-7.561	15.289	1.00	21.54	ADNA	C
ATOM	4833	C5'	ADE	7	29.798	-8.835	12.239	1.00	22.17	ADNA	C
ATOM	4834	C4'	ADE	7	30.012	-7.571	13.036	1.00	22.53	ADNA	C
ATOM	4835	O4'	ADE	7	28.786	-6.798	13.126	1.00	19.31	ADNA	O
ATOM	4836	C1'	ADE	7	28.544	-6.458	14.477	1.00	17.30	ADNA	C
ATOM	4837	C3'	ADE	7	30.477	-7.805	14.472	1.00	23.30	ADNA	C
ATOM	4838	O3'	ADE	7	31.498	-6.855	14.789	1.00	27.00	ADNA	O
ATOM	4839	P	CYT	8	32.491	-7.136	16.014	1.00	28.46	ADNA	P
ATOM	4840	O1P	CYT	8	33.605	-6.175	15.891	1.00	32.10	ADNA	O
ATOM	4841	O2P	CYT	8	32.778	-8.578	16.120	1.00	32.56	ADNA	O
ATOM	4842	O5'	CYT	8	31.609	-6.765	17.284	1.00	34.05	ADNA	O
ATOM	4843	N1	CYT	8	27.681	-4.281	17.991	1.00	16.71	ADNA	N
ATOM	4844	C6	CYT	8	27.537	-5.633	18.122	1.00	16.17	ADNA	C
ATOM	4845	C2	CYT	8	26.567	-3.445	18.096	1.00	13.58	ADNA	C
ATOM	4846	O2	CYT	8	26.731	-2.231	18.032	1.00	13.59	ADNA	O
ATOM	4847	N3	CYT	8	25.339	-3.989	18.268	1.00	12.15	ADNA	N
ATOM	4848	C4	CYT	8	25.209	-5.319	18.350	1.00	14.49	ADNA	C
ATOM	4849	N4	CYT	8	23.984	-5.826	18.489	1.00	11.53	ADNA	N
ATOM	4850	C5	CYT	8	26.334	-6.190	18.289	1.00	11.35	ADNA	C
ATOM	4851	C2'	CYT	8	29.789	-3.136	18.891	1.00	24.65	ADNA	C
ATOM	4852	C5'	CYT	8	31.883	-5.613	18.066	1.00	28.44	ADNA	C
ATOM	4853	C4'	CYT	8	31.219	-4.404	17.450	1.00	27.76	ADNA	C
ATOM	4854	O4'	CYT	8	29.829	-4.691	17.147	1.00	22.89	ADNA	O
ATOM	4855	C1'	CYT	8	29.003	-3.684	17.711	1.00	21.09	ADNA	C
ATOM	4856	C3'	CYT	8	31.211	-3.166	18.347	1.00	29.54	ADNA	C
ATOM	4857	O3'	CYT	8	31.495	-2.013	17.542	1.00	37.85	ADNA	O
ATOM	4858	P	THY	9	31.807	-0.607	18.251	1.00	43.52	ADNA	P
ATOM	4859	O1P	THY	9	31.913	0.440	17.202	1.00	42.42	ADNA	O
ATOM	4860	O2P	THY	9	32.914	-0.795	19.223	1.00	41.94	ADNA	O
ATOM	4861	O5'	THY	9	30.459	-0.345	19.046	1.00	39.53	ADNA	O
ATOM	4862	N1	THY	9	26.666	-1.072	21.651	1.00	15.38	ADNA	N
ATOM	4863	C6	THY	9	27.463	-2.198	21.698	1.00	9.90	ADNA	C
ATOM	4864	C2	THY	9	25.286	-1.173	21.754	1.00	12.26	ADNA	C
ATOM	4865	O2	THY	9	24.552	-0.210	21.815	1.00	10.91	ADNA	O
ATOM	4866	N3	THY	9	24.799	-2.462	21.802	1.00	10.29	ADNA	N
ATOM	4867	C4	THY	9	25.532	-3.627	21.796	1.00	8.97	ADNA	C
ATOM	4868	O4	THY	9	24.952	-4.713	21.779	1.00	8.56	ADNA	O



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ATOM	4869	C5	THY	9	26.979	-3.447	21.787	1.00	9.92	ADNA	C
ATOM	4870	C5A	THY	9	27.857	-4.657	21.891	1.00	11.37	ADNA	C
ATOM	4871	C2'	THY	9	28.144	0.811	22.580	1.00	22.79	ADNA	C
ATOM	4872	C5'	THY	9	30.468	0.219	20.335	1.00	30.77	ADNA	C
ATOM	4873	C4'	THY	9	29.246	1.084	20.489	1.00	28.20	ADNA	C
ATOM	4874	O4'	THY	9	28.062	0.272	20.294	1.00	27.68	ADNA	O
ATOM	4875	C1'	THY	9	27.252	0.292	21.461	1.00	21.02	ADNA	C
ATOM	4876	C3'	THY	9	29.097	1.743	21.851	1.00	25.63	ADNA	C
ATOM	4877	O3'	THY	9	28.555	3.036	21.619	1.00	21.30	ADNA	O
ATOM	4878	P	THY	10	28.537	4.127	22.789	1.00	22.42	ADNA	P
ATOM	4879	O1P	THY	10	28.576	5.447	22.105	1.00	18.77	ADNA	O
ATOM	4880	O2P	THY	10	29.549	3.807	23.805	1.00	19.02	ADNA	O
ATOM	4881	O5'	THY	10	27.073	3.956	23.396	1.00	18.66	ADNA	O
ATOM	4882	N1	THY	10	24.234	0.831	24.914	1.00	14.55	ADNA	N
ATOM	4883	C6	THY	10	25.510	0.353	25.127	1.00	11.92	ADNA	C
ATOM	4884	C2	THY	10	23.158	-0.024	24.855	1.00	13.54	ADNA	C
ATOM	4885	O2	THY	10	22.015	0.352	24.660	1.00	9.52	ADNA	O
ATOM	4886	N3	THY	10	23.465	-1.358	25.016	1.00	10.79	ADNA	N
ATOM	4887	C4	THY	10	24.713	-1.914	25.195	1.00	11.79	ADNA	C
ATOM	4888	O4	THY	10	24.836	-3.131	25.272	1.00	11.69	ADNA	O
ATOM	4889	C5	THY	10	25.801	-0.962	25.256	1.00	14.43	ADNA	C
ATOM	4890	C5A	THY	10	27.197	-1.468	25.444	1.00	12.79	ADNA	C
ATOM	4891	C2'	THY	10	24.648	3.264	25.596	1.00	17.41	ADNA	C
ATOM	4892	C5'	THY	10	25.947	4.230	22.573	1.00	19.39	ADNA	C
ATOM	4893	C4'	THY	10	24.654	3.980	23.314	1.00	17.49	ADNA	C
ATOM	4894	O4'	THY	10	24.334	2.574	23.383	1.00	18.45	ADNA	O
ATOM	4895	C1'	THY	10	23.938	2.253	24.707	1.00	13.54	ADNA	C
ATOM	4896	C3'	THY	10	24.587	4.523	24.741	1.00	17.62	ADNA	C
ATOM	4897	S5'	GUA	11	24.557	1.169	34.295	1.00	57.17	CDNA	S
ATOM	4898	N9	GUA	11	22.298	-1.610	31.995	1.00	27.76	CDNA	N
ATOM	4899	C4	GUA	11	21.522	-2.740	31.903	1.00	23.47	CDNA	C
ATOM	4900	N3	GUA	11	20.173	-2.772	31.826	1.00	20.26	CDNA	N
ATOM	4901	C2	GUA	11	19.717	-4.004	31.751	1.00	18.12	CDNA	C
ATOM	4902	N2	GUA	11	18.411	-4.218	31.650	1.00	16.08	CDNA	N
ATOM	4903	N1	GUA	11	20.516	-5.116	31.762	1.00	19.17	CDNA	N
ATOM	4904	C6	GUA	11	21.908	-5.101	31.828	1.00	18.61	CDNA	C
ATOM	4905	O6	GUA	11	22.537	-6.160	31.802	1.00	20.98	CDNA	O
ATOM	4906	C5	GUA	11	22.410	-3.795	31.907	1.00	19.87	CDNA	C
ATOM	4907	N7	GUA	11	23.721	-3.339	31.997	1.00	21.60	CDNA	N
ATOM	4908	C8	GUA	11	23.607	-2.039	32.043	1.00	25.52	CDNA	C
ATOM	4909	C2'	GUA	11	21.599	0.293	33.450	1.00	38.22	CDNA	C
ATOM	4910	C5'	GUA	11	24.356	1.986	32.713	1.00	48.25	CDNA	C
ATOM	4911	C4'	GUA	11	22.937	1.823	32.215	1.00	42.40	CDNA	C
ATOM	4912	O4'	GUA	11	22.823	0.587	31.475	1.00	35.93	CDNA	O
ATOM	4913	C1'	GUA	11	21.813	-0.233	32.040	1.00	34.35	CDNA	C
ATOM	4914	C3'	GUA	11	21.851	1.779	33.286	1.00	38.33	CDNA	C
ATOM	4915	O3'	GUA	11	20.675	2.419	32.778	1.00	38.63	CDNA	O
ATOM	4916	P	GUA	12	20.211	3.831	33.383	1.00	40.93	CDNA	P
ATOM	4917	O1P	GUA	12	19.620	4.640	32.293	1.00	40.83	CDNA	O
ATOM	4918	O2P	GUA	12	21.343	4.375	34.165	1.00	42.80	CDNA	O
ATOM	4919	O5'	GUA	12	19.018	3.442	34.357	1.00	39.57	CDNA	O
ATOM	4920	N9	GUA	12	19.036	-0.607	35.932	1.00	27.59	CDNA	N
ATOM	4921	C4	GUA	12	18.947	-1.937	35.600	1.00	24.99	CDNA	C
ATOM	4922	N3	GUA	12	17.825	-2.585	35.230	1.00	25.52	CDNA	N
ATOM	4923	C2	GUA	12	18.049	-3.860	34.974	1.00	23.27	CDNA	C
ATOM	4924	N2	GUA	12	17.035	-4.643	34.594	1.00	21.98	CDNA	N
ATOM	4925	N1	GUA	12	19.283	-4.454	35.072	1.00	24.97	CDNA	N
ATOM	4926	C6	GUA	12	20.452	-3.804	35.451	1.00	23.73	CDNA	C
ATOM	4927	O6	GUA	12	21.513	-4.430	35.504	1.00	24.83	CDNA	O
ATOM	4928	C5	GUA	12	20.221	-2.433	35.731	1.00	24.40	CDNA	C
ATOM	4929	N7	GUA	12	21.096	-1.438	36.148	1.00	27.39	CDNA	N
ATOM	4930	C8	GUA	12	20.349	-0.373	36.253	1.00	25.25	CDNA	C
ATOM	4931	C2'	GUA	12	18.131	1.609	36.752	1.00	34.40	CDNA	C
ATOM	4932	C5'	GUA	12	17.730	3.115	33.826	1.00	36.51	CDNA	C
ATOM	4933	C4'	GUA	12	17.043	2.085	34.696	1.00	37.04	CDNA	C
ATOM	4934	O4'	GUA	12	17.701	0.792	34.618	1.00	29.82	CDNA	O
ATOM	4935	C1'	GUA	12	17.931	0.343	35.943	1.00	30.94	CDNA	C
ATOM	4936	C3'	GUA	12	16.994	2.436	36.186	1.00	37.98	CDNA	C
ATOM	4937	O3'	GUA	12	15.778	1.912	36.720	1.00	45.99	CDNA	O
ATOM	4938	P	ADE	13	14.865	2.807	37.689	1.00	49.34	CDNA	P
ATOM	4939	O1P	ADE	13	15.622	3.105	38.938	1.00	46.85	CDNA	O
ATOM	4940	O2P	ADE	13	14.303	3.920	36.884	1.00	50.59	CDNA	O
ATOM	4941	O5'	ADE	13	13.682	1.804	38.034	1.00	48.36	CDNA	O
ATOM	4942	N9	ADE	13	15.559	-1.770	38.749	1.00	34.42	CDNA	N
ATOM	4943	C4	ADE	13	16.404	-2.844	38.592	1.00	29.88	CDNA	C
ATOM	4944	N3	ADE	13	16.075	-4.103	38.255	1.00	28.46	CDNA	N

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ATOM	4945	C2	ADE	13	17.159	-4.869	38.187	1.00	27.76	CDNA	C
ATOM	4946	N1	ADE	13	18.442	-4.544	38.392	1.00	27.02	CDNA	N
ATOM	4947	C6	ADE	13	18.736	-3.266	38.719	1.00	27.71	CDNA	C
ATOM	4948	N6	ADT	13	20.015	-2.927	38.894	1.00	26.22	CDNA	N
ATOM	4949	C5	ADT	13	17.673	-2.362	38.843	1.00	28.55	CDNA	C
ATOM	4950	N7	ADE	13	17.631	-1.018	39.181	1.00	31.51	CDNA	N
ATOM	4951	C8	ADE	13	16.359	-0.717	39.115	1.00	32.99	CDNA	C
ATOM	4952	C2'	ADE	13	13.333	-0.951	39.572	1.00	41.23	CDNA	C
ATOM	4953	C5'	ADE	13	12.974	1.147	36.987	1.00	46.51	CDNA	C
ATOM	4954	C4'	ADE	13	12.676	-0.285	37.369	1.00	46.41	CDNA	C
ATOM	4955	O4'	ADE	13	13.870	-1.104	37.290	1.00	43.53	CDNA	O
ATOM	4956	C1'	ADE	13	14.110	-1.749	38.538	1.00	39.54	CDNA	C
ATOM	4957	C3'	ADE	13	12.125	-0.472	38.782	1.00	47.24	CDNA	C
ATOM	4958	O3'	ADE	13	11.088	-1.459	38.753	1.00	52.87	CDNA	O
ATOM	4959	P	ADE	14	10.282	-1.816	40.095	1.00	56.46	CDNA	P
ATOM	4960	O1P	ADE	14	8.845	-1.898	39.717	1.00	55.87	CDNA	O
ATOM	4961	O2P	ADE	14	10.707	-0.876	41.166	1.00	57.64	CDNA	O
ATOM	4962	O5'	ADE	14	10.809	-3.278	40.452	1.00	53.68	CDNA	O
ATOM	4963	N9	ADE	14	14.665	-4.763	41.541	1.00	40.37	CDNA	N
ATOM	4964	C4	ADE	14	15.989	-5.136	41.507	1.00	34.82	CDNA	C
ATOM	4965	N3	ADE	14	16.486	-6.350	41.218	1.00	33.40	CDNA	N
ATOM	4966	C2	ADE	14	17.817	-6.336	41.263	1.00	32.80	CDNA	C
ATOM	4967	N1	ADE	14	18.644	-5.325	41.545	1.00	29.52	CDNA	N
ATOM	4968	C6	ADE	14	18.113	-4.119	41.836	1.00	31.90	CDNA	C
ATOM	4969	N6	ADE	14	18.940	-3.113	42.124	1.00	31.34	CDNA	N
ATOM	4970	C5	ADE	14	16.710	-4.000	41.820	1.00	32.27	CDNA	C
ATOM	4971	N7	ADE	14	15.860	-2.932	42.068	1.00	35.85	CDNA	N
ATOM	4972	C8	ADE	14	14.661	-3.438	41.897	1.00	38.13	CDNA	C
ATOM	4973	C2'	ADE	14	12.348	-5.577	42.180	1.00	49.45	CDNA	C
ATOM	4974	C5'	ADE	14	10.806	-4.304	39.457	1.00	53.47	CDNA	C
ATOM	4975	C4'	ADE	14	11.587	-5.514	39.919	1.00	51.77	CDNA	C
ATOM	4976	O4'	ADE	14	13.009	-5.238	39.965	1.00	49.70	CDNA	O
ATOM	4977	C1'	ADE	14	13.529	-5.634	41.225	1.00	46.05	CDNA	C
ATOM	4978	C3'	ADE	14	11.217	-6.076	41.292	1.00	52.67	CDNA	C
ATOM	4979	O3'	ADE	14	11.233	-7.509	41.212	1.00	56.64	CDNA	O
ATOM	4980	P	ADE	15	10.319	-8.391	42.207	1.00	57.86	CDNA	P
ATOM	4981	O1P	ADE	15	9.544	-9.322	41.343	1.00	57.94	CDNA	O
ATOM	4982	O2P	ADE	15	9.608	-7.509	43.177	1.00	54.18	CDNA	O
ATOM	4983	O5'	ADE	15	11.391	-9.249	43.004	1.00	54.15	CDNA	O
ATOM	4984	N9	ADE	15	15.982	-7.891	44.398	1.00	38.14	CDNA	N
ATOM	4985	C4	ADE	15	17.221	-7.313	44.471	1.00	33.04	CDNA	C
ATOM	4986	N3	ADE	15	18.404	-7.912	44.272	1.00	31.55	CDNA	N
ATOM	4987	C2	ADE	15	19.393	-7.043	44.431	1.00	31.68	CDNA	C
ATOM	4988	N1	ADE	15	19.333	-5.744	44.739	1.00	30.73	CDNA	N
ATOM	4989	C6	ADE	15	18.125	-5.176	44.930	1.00	30.34	CDNA	C
ATOM	4990	N6	ADE	15	18.066	-3.876	45.232	1.00	28.88	CDNA	N
ATOM	4991	C5	ADE	15	17.000	-5.988	44.796	1.00	31.80	CDNA	C
ATOM	4992	N7	ADE	15	15.644	-5.733	44.933	1.00	34.99	CDNA	N
ATOM	4993	C8	ADE	15	15.081	-6.890	44.683	1.00	36.27	CDNA	C
ATOM	4994	C2'	ADE	15	14.815	-9.963	45.124	1.00	45.63	CDNA	C
ATOM	4995	C5'	ADE	15	12.717	-8.768	43.121	1.00	51.18	CDNA	C
ATOM	4996	C4'	ADE	15	13.705	-9.902	43.022	1.00	48.61	CDNA	C
ATOM	4997	O4'	ADE	15	15.002	-9.300	42.851	1.00	45.21	CDNA	O
ATOM	4998	C1'	ADE	15	15.705	-9.288	44.083	1.00	42.37	CDNA	C
ATOM	4999	C3'	ADE	15	13.807	-10.736	44.294	1.00	49.12	CDNA	C
ATOM	5000	O3'	ADE	15	14.264	-12.063	43.996	1.00	50.61	CDNA	O
ATOM	5001	P	ADE	16	14.421	-13.140	45.183	1.00	53.16	CDNA	P
ATOM	5002	O1P	ADE	16	14.484	-14.476	44.541	1.00	52.73	CDNA	O
ATOM	5003	O2P	ADE	16	13.386	-12.874	46.221	1.00	52.32	CDNA	O
ATOM	5004	O5'	ADE	16	15.854	-12.811	45.797	1.00	49.41	CDNA	O
ATOM	5005	N9	ADE	16	18.006	-9.442	47.450	1.00	36.93	CDNA	N
ATOM	5006	C4	ADE	16	18.649	-8.232	47.599	1.00	33.69	CDNA	C
ATOM	5007	N3	ADE	16	19.971	-7.994	47.531	1.00	34.17	CDNA	N
ATOM	5008	C2	ADE	16	20.227	-6.703	47.736	1.00	34.97	CDNA	C
ATOM	5009	N1	ADE	16	19.376	-5.698	47.983	1.00	35.75	CDNA	N
ATOM	5010	C6	ADE	16	18.054	-5.973	48.041	1.00	34.40	CDNA	C
ATOM	5011	N6	ADE	16	17.202	-4.974	48.285	1.00	33.99	CDNA	N
ATOM	5012	C5	ADE	16	17.653	-7.302	47.838	1.00	31.77	CDNA	C
ATOM	5013	N7	ADE	16	16.403	-7.905	47.826	1.00	32.52	CDNA	N
ATOM	5014	C8	ADE	16	16.664	-9.170	47.590	1.00	34.75	CDNA	C
ATOM	5015	C2'	ADE	16	18.090	-11.879	48.066	1.00	45.15	CDNA	C
ATOM	5016	C5'	ADE	16	17.027	-12.987	45.008	1.00	47.99	CDNA	C
ATOM	5017	C4'	ADE	16	18.260	-12.574	45.777	1.00	46.70	CDNA	C
ATOM	5018	O4'	ADE	16	18.360	-11.130	45.870	1.00	42.10	CDNA	O
ATOM	5019	C1'	ADE	16	18.634	-10.747	47.208	1.00	41.34	CDNA	C
ATOM	5020	C3'	ADE	16	18.350	-13.107	47.205	1.00	47.90	CDNA	C

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ATOM	5021	O3'	ADE	16	19.660	-13.626	47.439	1.00	51.72	CDNA	O
ATOM	5022	P	ADE	17	20.031	-14.233	48.880	1.00	57.06	CDNA	P
ATOM	5023	O1P	ADE	17	20.605	-15.584	48.669	1.00	56.73	CDNA	O
ATOM	5024	O2P	ADE	17	18.864	-14.065	49.788	1.00	57.12	CDNA	O
ATOM	5025	O5'	ADE	17	21.203	-13.273	49.369	1.00	56.41	CDNA	O
ATOM	5026	N9	ADE	17	20.853	-9.500	50.684	1.00	39.93	CDNA	N
ATOM	5027	C4	ADE	17	20.538	-8.172	50.844	1.00	35.37	CDNA	C
ATOM	5028	N3	ADE	17	21.383	-7.132	50.833	1.00	35.46	CDNA	N
ATOM	5029	C2	ADE	17	20.730	-5.995	51.031	1.00	33.06	CDNA	C
ATOM	5030	N1	ADE	17	19.425	-5.790	51.222	1.00	33.13	CDNA	N
ATOM	5031	C6	ADE	17	18.596	-6.854	51.226	1.00	33.91	CDNA	C
ATOM	5032	N6	ADE	17	17.288	-6.639	51.422	1.00	33.12	CDNA	N
ATOM	5033	C5	ADE	17	19.167	-8.125	51.026	1.00	32.91	CDNA	C
ATOM	5034	N7	ADE	17	18.621	-9.401	50.984	1.00	35.09	CDNA	N
ATOM	5035	C8	ADE	17	19.660	-10.180	50.779	1.00	38.87	CDNA	C
ATOM	5036	C2'	ADE	17	22.571	-11.223	51.342	1.00	52.10	CDNA	C
ATOM	5037	C5'	ADE	17	22.219	-12.860	48.457	1.00	55.43	CDNA	C
ATOM	5038	C4'	ADE	17	23.036	-11.739	49.052	1.00	55.03	CDNA	C
ATOM	5039	O4'	ADE	17	22.246	-10.527	49.125	1.00	51.68	CDNA	O
ATOM	5040	C1'	ADE	17	22.196	-10.044	50.457	1.00	46.12	CDNA	C
ATOM	5041	C3'	ADE	17	23.534	-12.013	50.468	1.00	56.45	CDNA	C
ATOM	5042	O3'	ADE	17	24.888	-11.560	50.592	1.00	61.14	CDNA	O
ATOM	5043	P	THY	18	25.818	-12.124	51.779	1.00	64.69	CDNA	P
ATOM	5044	O1P	THY	18	27.195	-12.257	51.232	1.00	63.39	CDNA	O
ATOM	5045	O2P	THY	18	25.156	-13.298	52.408	1.00	62.23	CDNA	O
ATOM	5046	O5'	THY	18	25.802	-10.930	52.830	1.00	64.52	CDNA	O
ATOM	5047	N1	THY	18	22.168	-7.317	54.147	1.00	54.69	CDNA	N
ATOM	5048	C6	THY	18	21.653	-8.594	54.172	1.00	52.14	CDNA	C
ATOM	5049	C2	THY	18	21.348	-6.216	54.228	1.00	54.59	CDNA	C
ATOM	5050	O2	THY	18	21.761	-5.065	54.207	1.00	57.00	CDNA	O
ATOM	5051	N3	THY	18	20.012	-6.510	54.333	1.00	52.11	CDNA	N
ATOM	5052	C4	THY	18	19.431	-7.762	54.363	1.00	51.17	CDNA	C
ATOM	5053	O4	THY	18	18.213	-7.870	54.461	1.00	52.76	CDNA	O
ATOM	5054	C5	THY	18	20.347	-8.866	54.273	1.00	51.16	CDNA	C
ATOM	5055	C5A	THY	18	19.805	-10.260	54.296	1.00	50.05	CDNA	C
ATOM	5056	C2'	THY	18	24.412	-7.772	55.157	1.00	63.00	CDNA	C
ATOM	5057	C5'	THY	18	24.689	-10.044	52.879	1.00	63.96	CDNA	C
ATOM	5058	C4'	THY	18	25.158	-8.621	53.056	1.00	63.13	CDNA	C
ATOM	5059	O4'	THY	18	24.035	-7.742	52.825	1.00	61.34	CDNA	O
ATOM	5060	C1'	THY	18	23.622	-7.117	54.029	1.00	59.26	CDNA	C
ATOM	5061	C3'	THY	18	25.650	-8.315	54.465	1.00	64.84	CDNA	C
ATOM	5062	O3'	THY	18	26.717	-7.362	54.430	1.00	67.45	CDNA	O
ATOM	5063	P	THY	19	27.412	-6.891	55.803	1.00	68.76	CDNA	P
ATOM	5064	O1P	THY	19	28.773	-6.394	55.449	1.00	65.76	CDNA	O
ATOM	5065	O2P	THY	19	27.264	-7.978	56.809	1.00	68.05	CDNA	O
ATOM	5066	O5'	THY	19	26.516	-5.657	56.266	1.00	66.62	CDNA	O
ATOM	5067	N1	THY	19	22.397	-4.820	57.478	1.00	51.49	CDNA	N
ATOM	5068	C6	THY	19	22.695	-6.165	57.554	1.00	49.65	CDNA	C
ATOM	5069	C2	THY	19	21.096	-4.368	57.570	1.00	47.03	CDNA	C
ATOM	5070	O2	THY	19	20.792	-3.188	57.527	1.00	43.81	CDNA	O
ATOM	5071	N3	THY	19	20.158	-5.354	57.718	1.00	45.18	CDNA	N
ATOM	5072	C4	THY	19	20.381	-6.714	57.792	1.00	48.14	CDNA	C
ATOM	5073	O4	THY	19	19.430	-7.482	57.912	1.00	48.57	CDNA	O
ATOM	5074	C5	THY	19	21.768	-7.119	57.713	1.00	48.33	CDNA	C
ATOM	5075	C5A	THY	19	22.105	-8.574	57.818	1.00	48.06	CDNA	C
ATOM	5076	C2'	THY	19	24.628	-3.910	58.259	1.00	60.97	CDNA	C
ATOM	5077	C5'	THY	19	26.341	-4.532	55.408	1.00	63.93	CDNA	C
ATOM	5078	C4'	THY	19	25.404	-3.526	56.032	1.00	62.48	CDNA	C
ATOM	5079	O4'	THY	19	24.038	-4.008	56.012	1.00	60.54	CDNA	O
ATOM	5080	C1'	THY	19	23.465	-3.819	57.294	1.00	56.82	CDNA	C
ATOM	5081	C3'	THY	19	25.702	-3.163	57.487	1.00	64.12	CDNA	C
ATOM	5082	O3'	THY	19	25.529	-1.755	57.660	1.00	67.91	CDNA	O
ATOM	5083	P	THY	20	25.955	-1.061	59.044	1.00	69.85	CDNA	P
ATOM	5084	O1P	THY	20	26.949	-0.006	58.705	1.00	67.89	CDNA	O
ATOM	5085	O2P	THY	20	26.311	-2.125	60.023	1.00	69.99	CDNA	O
ATOM	5086	O5'	THY	20	24.606	-0.374	59.539	1.00	67.45	CDNA	O
ATOM	5087	N1	THY	20	20.840	-2.055	60.647	1.00	54.02	CDNA	N
ATOM	5088	C6	THY	20	21.902	-2.932	60.690	1.00	50.48	CDNA	C
ATOM	5089	C2	THY	20	19.533	-2.507	60.744	1.00	50.63	CDNA	C
ATOM	5090	O2	THY	20	18.561	-1.770	60.711	1.00	50.43	CDNA	O
ATOM	5091	N3	THY	20	19.406	-3.864	60.882	1.00	47.23	CDNA	N
ATOM	5092	C4	THY	20	20.421	-4.797	60.927	1.00	48.10	CDNA	C
ATOM	5093	O4	THY	20	20.144	-5.989	61.039	1.00	48.22	CDNA	O
ATOM	5094	C5	THY	20	21.764	-4.256	60.826	1.00	47.79	CDNA	C
ATOM	5095	C5A	THY	20	22.933	-5.189	60.879	1.00	47.93	CDNA	C
ATOM	5096	C2'	THY	20	22.070	-0.008	61.481	1.00	63.54	CDNA	C

ATOM	5097	C5'	THY	20	23.855	0.459	58.661	1.00	66.40	CDNA	C
ATOM	5098	C4'	THY	20	22.510	0.786	59.268	1.00	65.36	CDNA	C
ATOM	5099	O4'	THY	20	21.636	-0.370	59.216	1.00	63.23	CDNA	O
ATOM	5100	C1'	THY	20	21.076	-0.601	60.498	1.00	59.65	CDNA	C
ATOM	5101	C3'	THY	20	22.559	1.221	60.733	1.00	66.32	CDNA	C
ATOM	5102	O3'	THY	20	21.670	2.321	60.940	1.00	69.67	CDNA	O
ATOM	5103	P	THY	21	21.579	3.015	62.387	1.00	72.52	CDNA	P
ATOM	5104	O1P	THY	21	22.010	4.429	62.247	1.00	73.90	CDNA	O
ATOM	5105	O2P	THY	21	22.248	2.139	63.383	1.00	73.35	CDNA	O
ATOM	5106	O5'	THY	21	20.017	3.009	62.682	1.00	72.07	CDNA	O
ATOM	5107	N1	THY	21	18.185	-0.660	63.565	1.00	62.89	CDNA	N
ATOM	5108	C6	THY	21	19.565	-0.642	63.581	1.00	60.07	CDNA	C
ATOM	5109	C2	THY	21	17.481	-1.813	63.849	1.00	61.55	CDNA	C
ATOM	5110	O2	THY	21	16.260	-1.868	63.864	1.00	61.15	CDNA	O
ATOM	5111	N3	THY	21	18.264	-2.908	64.121	1.00	59.43	CDNA	N
ATOM	5112	C4	THY	21	19.646	-2.964	64.141	1.00	58.68	CDNA	C
ATOM	5113	O4	THY	21	20.210	-4.029	64.389	1.00	58.99	CDNA	O
ATOM	5114	C5	THY	21	20.319	-1.715	63.851	1.00	57.60	CDNA	C
ATOM	5115	CSA	THY	21	21.815	-1.674	63.866	1.00	56.44	CDNA	C
ATOM	5116	C2'	THY	21	17.556	1.700	64.221	1.00	69.75	CDNA	C
ATOM	5117	C5'	THY	21	19.083	3.162	61.617	1.00	71.69	CDNA	C
ATOM	5118	C4'	THY	21	17.769	2.512	61.976	1.00	71.49	CDNA	C
ATOM	5119	O4'	THY	21	17.908	1.068	61.997	1.00	69.80	CDNA	O
ATOM	5120	C1'	THY	21	17.418	0.559	63.231	1.00	67.33	CDNA	C
ATOM	5121	C3'	THY	21	17.230	2.904	63.351	1.00	72.39	CDNA	C
ATOM	5122	O3'	THY	21	15.819	3.099	63.276	1.00	75.56	CDNA	O
ATOM	5123	P	THY	22	15.001	3.461	64.605	1.00	79.97	CDNA	P
ATOM	5124	O1P	THY	22	13.717	4.077	64.181	1.00	79.84	CDNA	O
ATOM	5125	O2P	THY	22	15.914	4.208	65.516	1.00	78.32	CDNA	O
ATOM	5126	O5'	THY	22	14.684	2.038	65.249	1.00	79.11	CDNA	O
ATOM	5127	N1	THY	22	16.106	-1.259	67.186	1.00	69.68	CDNA	N
ATOM	5128	C6	THY	22	17.055	-0.261	67.220	1.00	68.57	CDNA	C
ATOM	5129	C2	THY	22	16.467	-2.589	67.137	1.00	67.57	CDNA	C
ATOM	5130	O2	THY	22	15.657	-3.502	67.107	1.00	67.07	CDNA	O
ATOM	5131	N3	THY	22	17.820	-2.813	67.125	1.00	65.12	CDNA	N
ATOM	5132	C4	THY	22	18.825	-1.865	67.160	1.00	67.13	CDNA	C
ATOM	5133	O4	THY	22	20.004	-2.219	67.147	1.00	66.66	CDNA	O
ATOM	5134	C5	THY	22	18.374	-0.491	67.210	1.00	67.79	CDNA	C
ATOM	5135	CSA	THY	22	19.390	0.607	67.251	1.00	69.20	CDNA	C
ATOM	5136	C2'	THY	22	14.316	0.413	67.836	1.00	74.55	CDNA	C
ATOM	5137	C5'	THY	22	13.645	1.215	64.718	1.00	78.30	CDNA	C
ATOM	5138	C4'	THY	22	13.211	0.187	65.738	1.00	77.07	CDNA	C
ATOM	5139	O4'	THY	22	14.214	-0.852	65.860	1.00	75.62	CDNA	O
ATOM	5140	C1'	THY	22	14.666	-0.928	67.206	1.00	72.99	CDNA	C
ATOM	5141	C3'	THY	22	13.000	0.736	67.150	1.00	76.56	CDNA	C
ATOM	5142	O3'	THY	22	11.998	-0.038	67.812	1.00	78.03	CDNA	O
ATOM	5143	O5'	ADE	101	17.271	-15.001	69.108	1.00	74.83	BDNA	O
ATOM	5144	N9	ADE	101	17.119	-9.909	67.437	1.00	65.05	BDNA	N
ATOM	5145	C4	ADE	101	17.095	-8.534	67.438	1.00	61.55	BDNA	C
ATOM	5146	N3	ADE	101	16.044	-7.733	67.695	1.00	58.73	BDNA	N
ATOM	5147	C2	ADE	101	16.406	-6.452	67.636	1.00	55.87	BDNA	C
ATOM	5148	N1	ADE	101	17.608	-5.921	67.374	1.00	55.94	BDNA	N
ATOM	5149	C6	ADE	101	18.642	-6.753	67.122	1.00	57.95	BDNA	C
ATOM	5150	N6	ADE	101	19.844	-6.228	66.876	1.00	57.34	BDNA	N
ATOM	5151	C5	ADE	101	18.388	-8.134	67.142	1.00	60.57	BDNA	C
ATOM	5152	N7	ADE	101	19.205	-9.235	66.920	1.00	61.91	BDNA	N
ATOM	5153	C8	ADE	101	18.406	-10.260	67.099	1.00	63.81	BDNA	C
ATOM	5154	C2'	ADE	101	15.788	-11.940	66.775	1.00	71.00	BDNA	C
ATOM	5155	C5'	ADE	101	17.429	-13.579	69.078	1.00	74.15	BDNA	C
ATOM	5156	C4'	ADE	101	16.109	-12.851	68.960	1.00	73.21	BDNA	C
ATOM	5157	O4'	ADE	101	16.338	-11.425	69.015	1.00	71.92	BDNA	O
ATOM	5158	C1'	ADE	101	16.012	-10.809	67.772	1.00	69.24	BDNA	C
ATOM	5159	C3'	ADE	101	15.351	-13.097	67.659	1.00	73.43	BDNA	C
ATOM	5160	O3'	ADE	101	13.942	-13.069	67.921	1.00	75.19	BDNA	O
ATOM	5161	P	ADE	102	12.904	-13.455	66.757	1.00	78.42	BDNA	P
ATOM	5162	O1P	ADE	102	11.653	-13.916	67.414	1.00	76.54	BDNA	O
ATOM	5163	O2P	ADE	102	13.588	-14.335	65.771	1.00	77.40	BDNA	O
ATOM	5164	O5'	ADE	102	12.595	-12.057	66.056	1.00	77.13	BDNA	O
ATOM	5165	N9	ADE	102	14.419	-8.882	64.141	1.00	60.25	BDNA	N
ATOM	5166	C4	ADE	102	15.230	-7.771	64.157	1.00	55.22	BDNA	C
ATOM	5167	N3	ADE	102	14.855	-6.483	64.265	1.00	52.07	BDNA	N
ATOM	5168	C2	ADE	102	15.919	-5.684	64.260	1.00	50.09	BDNA	C
ATOM	5169	N1	ADE	102	17.217	-6.001	64.166	1.00	49.79	BDNA	N
ATOM	5170	C6	ADE	102	17.556	-7.303	64.057	1.00	50.91	BDNA	C
ATOM	5171	N6	ADE	102	18.847	-7.624	63.962	1.00	51.67	BDNA	N
ATOM	5172	C5	ADE	102	16.523	-8.249	64.050	1.00	53.72	BDNA	C

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ATOM	5173	N7	ADE	102	16.529	-9.633	63.957	1.00	56.26	BDNA	N
ATOM	5174	C8	ADE	102	15.261	-9.958	64.011	1.00	58.44	BDNA	C
ATOM	5175	C2'	ADE	102	12.300	-10.074	63.545	1.00	69.08	BDNA	C
ATOM	5176	C5'	ADE	102	11.800	-11.078	66.720	1.00	75.03	BDNA	C
ATOM	5177	C4'	ADE	102	11.494	-9.926	65.792	1.00	72.32	BDNA	C
ATOM	5178	O4'	ADE	102	12.652	-9.072	65.635	1.00	69.92	BDNA	O
ATOM	5179	C1'	ADE	102	12.962	-8.906	64.259	1.00	65.38	BDNA	C
ATOM	5180	C3'	ADE	102	11.054	-10.318	64.382	1.00	72.18	BDNA	C
ATOM	5181	O3'	ADE	102	9.993	-9.453	63.979	1.00	74.77	BDNA	O
ATOM	5182	P	ADE	103	9.283	-9.656	62.553	1.00	76.79	BDNA	P
ATOM	5183	O1P	ADE	103	7.876	-10.054	62.826	1.00	76.62	BDNA	O
ATOM	5184	O2P	ADE	103	10.135	-10.512	61.683	1.00	76.33	BDNA	O
ATOM	5185	O5'	ADE	103	9.265	-8.173	61.973	1.00	75.60	BDNA	O
ATOM	5186	N9	ADE	103	12.846	-6.045	61.051	1.00	55.50	BDNA	N
ATOM	5187	C4	ADE	103	14.082	-5.441	61.102	1.00	50.75	BDNA	C
ATOM	5188	N3	ADE	103	14.348	-4.143	61.322	1.00	48.05	BDNA	N
ATOM	5189	C2	ADE	103	15.666	-3.922	61.304	1.00	46.41	BDNA	C
ATOM	5190	N1	ADE	103	16.670	-4.785	61.106	1.00	42.73	BDNA	N
ATOM	5191	C6	ADE	103	16.368	-6.082	60.885	1.00	45.57	BDNA	C
ATOM	5192	N6	ADE	103	17.367	-6.942	60.686	1.00	45.63	BDNA	N
ATOM	5193	C5	ADE	103	15.005	-6.449	60.878	1.00	48.40	BDNA	C
ATOM	5194	N7	ADE	103	14.363	-7.666	60.686	1.00	50.47	BDNA	N
ATOM	5195	C8	ADE	103	13.089	-7.374	60.797	1.00	53.26	BDNA	C
ATOM	5196	C2'	ADE	103	10.523	-5.674	60.169	1.00	66.23	BDNA	C
ATOM	5197	C5'	ADE	103	8.912	-7.087	62.826	1.00	72.61	BDNA	C
ATOM	5198	C4'	ADE	103	9.539	-5.798	62.349	1.00	70.62	BDNA	C
ATOM	5199	O4'	ADE	103	10.986	-5.851	62.448	1.00	67.71	BDNA	O
ATOM	5200	C1'	ADE	103	11.557	-5.379	61.237	1.00	62.48	BDNA	C
ATOM	5201	C3'	ADE	103	9.222	-5.400	60.907	1.00	69.68	BDNA	C
ATOM	5202	O3'	ADE	103	8.897	-4.007	60.881	1.00	71.53	BDNA	O
ATOM	5203	P	ADE	104	8.715	-3.251	59.477	1.00	73.95	BDNA	P
ATOM	5204	O1P	ADE	104	7.689	-2.188	59.666	1.00	72.93	BDNA	O
ATOM	5205	O2P	ADE	104	8.533	-4.266	58.404	1.00	73.33	BDNA	O
ATOM	5206	O5'	ADE	104	10.124	-2.539	59.276	1.00	71.01	BDNA	O
ATOM	5207	N9	ADE	104	14.006	-3.052	58.027	1.00	50.05	BDNA	N
ATOM	5208	C4	ADE	104	15.345	-3.358	57.952	1.00	45.04	BDNA	C
ATOM	5209	N3	ADE	104	16.383	-2.515	58.086	1.00	41.71	BDNA	N
ATOM	5210	C2	ADE	104	17.534	-3.165	57.961	1.00	37.24	BDNA	C
ATOM	5211	N1	ADE	104	17.751	-4.463	57.739	1.00	39.76	BDNA	N
ATOM	5212	C6	ADE	104	16.686	-5.285	57.610	1.00	43.31	BDNA	C
ATOM	5213	N6	ADE	104	16.902	-6.586	57.394	1.00	46.44	BDNA	N
ATOM	5214	C5	ADE	104	15.408	-4.718	57.714	1.00	44.61	BDNA	C
ATOM	5215	N7	ADE	104	14.133	-5.263	57.626	1.00	44.97	BDNA	N
ATOM	5216	C8	ADE	104	13.339	-4.237	57.816	1.00	48.31	BDNA	C
ATOM	5217	C2'	ADE	104	12.276	-1.343	57.405	1.00	60.18	BDNA	C
ATOM	5218	C5'	ADE	104	10.610	-1.619	60.248	1.00	66.18	BDNA	C
ATOM	5219	C4'	ADE	104	11.782	-0.853	59.691	1.00	63.33	BDNA	C
ATOM	5220	O4'	ADE	104	12.937	-1.722	59.614	1.00	59.25	BDNA	O
ATOM	5221	C1'	ADE	104	13.444	-1.728	58.290	1.00	55.62	BDNA	C
ATOM	5222	C3'	ADE	104	11.548	-0.332	58.273	1.00	63.95	BDNA	C
ATOM	5223	O3'	ADE	104	12.118	0.972	58.129	1.00	66.56	BDNA	O
ATOM	5224	P	ADE	105	12.030	1.731	56.714	1.00	69.17	BDNA	P
ATOM	5225	O1P	ADE	105	11.425	3.068	56.955	1.00	68.06	BDNA	O
ATOM	5226	O2P	ADE	105	11.409	0.814	55.720	1.00	68.52	BDNA	O
ATOM	5227	O5'	ADE	105	13.561	1.940	56.326	1.00	65.84	BDNA	O
ATOM	5228	N9	ADE	105	16.471	-0.775	55.150	1.00	52.33	BDNA	N
ATOM	5229	C4	ADE	105	17.381	-1.789	54.948	1.00	46.65	BDNA	C
ATOM	5230	N3	ADE	105	18.722	-1.696	54.955	1.00	44.90	BDNA	N
ATOM	5231	C2	ADE	105	19.277	-2.888	54.743	1.00	43.51	BDNA	C
ATOM	5232	N1	ADE	105	18.690	-4.074	54.545	1.00	42.63	BDNA	N
ATOM	5233	C6	ADE	105	17.338	-4.132	54.546	1.00	45.68	BDNA	C
ATOM	5234	N6	ADE	105	16.745	-5.316	54.361	1.00	45.45	BDNA	N
ATOM	5235	C5	ADE	105	16.632	-2.934	54.750	1.00	45.22	BDNA	C
ATOM	5236	N7	ADE	105	15.274	-2.650	54.806	1.00	46.16	BDNA	N
ATOM	5237	C8	ADE	105	15.231	-1.361	55.043	1.00	49.49	BDNA	C
ATOM	5238	C2'	ADE	105	16.159	1.640	54.496	1.00	60.76	BDNA	C
ATOM	5239	C5'	ADE	105	14.480	2.469	57.279	1.00	64.09	BDNA	C
ATOM	5240	C4'	ADE	105	15.896	2.338	56.770	1.00	62.48	BDNA	C
ATOM	5241	O4'	ADE	105	16.275	0.940	56.720	1.00	60.98	BDNA	O
ATOM	5242	C1'	ADE	105	16.787	0.626	55.434	1.00	56.66	BDNA	C
ATOM	5243	C3'	ADE	105	16.124	2.889	55.363	1.00	63.16	BDNA	C
ATOM	5244	O3'	ADE	105	17.378	3.575	55.319	1.00	66.51	BDNA	O
ATOM	5245	P	THY	106	17.792	4.408	54.007	1.00	68.75	BDNA	P
ATOM	5246	O1P	THY	106	18.183	5.773	54.451	1.00	68.50	BDNA	O
ATOM	5247	O2P	THY	106	16.725	4.244	52.978	1.00	67.05	BDNA	O
ATOM	5248	O5'	THY	106	19.098	3.650	53.502	1.00	65.75	BDNA	O

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ATOM	5249	N1	THY	106	19.656	-1.081	51.866	1.00	48.00	BDNA N
ATOM	5250	C6	THY	106	18.402	-0.515	51.797	1.00	46.07	BDNA C
ATOM	5251	C2	THY	106	19.852	-2.415	51.605	1.00	44.16	BDNA C
ATOM	5252	O2	THY	106	20.955	-2.933	51.587	1.00	39.89	BDNA O
ATOM	5253	N3	THY	106	18.701	-3.124	51.361	1.00	41.57	BDNA N
ATOM	5254	C4	THY	106	17.407	-2.631	51.333	1.00	43.49	BDNA C
ATOM	5255	O4	THY	106	16.461	-3.397	51.153	1.00	41.37	BDNA O
ATOM	5256	C5	THY	106	17.287	-1.208	51.543	1.00	44.91	BDNA C
ATOM	5257	CSA	THY	106	15.934	-0.571	51.467	1.00	45.70	BDNA C
ATOM	5258	C2'	THY	106	21.096	0.926	51.353	1.00	59.69	BDNA C
ATOM	5259	C5'	THY	106	19.120	2.229	53.449	1.00	62.34	BDNA C
ATOM	5260	C4'	THY	106	20.538	1.716	53.525	1.00	61.36	BDNA C
ATOM	5261	O4'	THY	106	20.493	0.275	53.554	1.00	59.76	BDNA O
ATOM	5262	C1'	THY	106	20.809	-0.260	52.271	1.00	55.37	BDNA C
ATOM	5263	C3'	THY	106	21.397	2.061	52.317	1.00	61.67	BDNA C
ATOM	5264	O3'	THY	106	22.774	2.085	52.709	1.00	63.89	BDNA O
ATOM	5265	P	THY	107	23.895	2.569	51.664	1.00	68.69	BDNA P
ATOM	5266	O1P	THY	107	25.038	3.070	52.476	1.00	66.82	BDNA O
ATOM	5267	O2P	THY	107	23.261	3.460	50.652	1.00	67.54	BDNA O
ATOM	5268	O5'	THY	107	24.363	1.221	50.952	1.00	66.55	BDNA O
ATOM	5269	N1	THY	107	22.774	-2.151	48.827	1.00	53.86	BDNA N
ATOM	5270	C6	THY	107	21.944	-1.052	48.777	1.00	51.04	BDNA C
ATOM	5271	C2	THY	107	22.297	-3.414	48.572	1.00	50.53	BDNA C
ATOM	5272	O2	THY	107	23.008	-4.402	48.565	1.00	52.84	BDNA O
ATOM	5273	N3	THY	107	20.952	-3.479	48.322	1.00	46.42	BDNA N
ATOM	5274	C4	THY	107	20.059	-2.431	48.291	1.00	46.89	BDNA C
ATOM	5275	O4	THY	107	18.869	-2.648	48.088	1.00	46.45	BDNA O
ATOM	5276	C5	THY	107	20.632	-1.128	48.524	1.00	47.55	BDNA C
ATOM	5277	CSA	THY	107	19.741	0.072	48.475	1.00	48.88	BDNA C
ATOM	5278	C2'	THY	107	24.990	-0.944	48.473	1.00	58.52	BDNA C
ATOM	5279	C5'	THY	107	25.170	0.285	51.662	1.00	64.47	BDNA C
ATOM	5280	C4'	THY	107	25.472	-0.931	50.816	1.00	61.98	BDNA C
ATOM	5281	O4'	THY	107	24.264	-1.684	50.559	1.00	59.40	BDNA O
ATOM	5282	C1'	THY	107	24.200	-2.022	49.187	1.00	56.51	BDNA C
ATOM	5283	C3'	THY	107	26.124	-0.693	49.454	1.00	60.33	BDNA C
ATOM	5284	O3'	THY	107	27.177	-1.652	49.292	1.00	61.63	BDNA O
ATOM	5285	P	THY	108	27.840	-1.888	47.846	1.00	65.64	BDNA P
ATOM	5286	O1P	THY	108	29.271	-2.240	48.055	1.00	63.75	BDNA O
ATOM	5287	O2P	THY	108	27.484	-0.753	46.951	1.00	64.64	BDNA O
ATOM	5288	O5'	THY	108	27.097	-3.197	47.326	1.00	65.17	BDNA O
ATOM	5289	N1	THY	108	23.579	-4.611	45.521	1.00	51.00	BDNA N
ATOM	5290	C6	THY	108	23.709	-3.243	45.478	1.00	50.34	BDNA C
ATOM	5291	C2	THY	108	22.361	-5.217	45.338	1.00	48.76	BDNA C
ATOM	5292	O2	THY	108	22.208	-6.426	45.336	1.00	47.96	BDNA O
ATOM	5293	N3	THY	108	21.319	-4.353	45.155	1.00	46.24	BDNA N
ATOM	5294	C4	THY	108	21.368	-2.980	45.129	1.00	46.11	BDNA C
ATOM	5295	O4	THY	108	20.337	-2.341	44.983	1.00	47.67	BDNA O
ATOM	5296	C5	THY	108	22.681	-2.409	45.291	1.00	48.31	BDNA C
ATOM	5297	CSA	THY	108	22.838	-0.923	45.243	1.00	48.75	BDNA C
ATOM	5298	C2'	THY	108	26.020	-5.094	45.071	1.00	57.76	BDNA C
ATOM	5299	C5'	THY	108	27.021	-4.358	48.155	1.00	63.15	BDNA C
ATOM	5300	C4'	THY	108	26.463	-5.525	47.375	1.00	61.09	BDNA C
ATOM	5301	O4'	THY	108	25.038	-5.373	47.174	1.00	58.64	BDNA O
ATOM	5302	C1'	THY	108	24.740	-5.473	45.790	1.00	55.61	BDNA C
ATOM	5303	C3'	THY	108	27.066	-5.706	45.585	1.00	59.97	BDNA C
ATOM	5304	O3'	THY	108	27.176	-7.097	45.716	1.00	63.00	BDNA O
ATOM	5305	P	THY	109	28.280	-7.624	44.682	1.00	66.24	BDNA P
ATOM	5306	O1P	THY	109	29.513	-7.921	45.454	1.00	67.12	BDNA O
ATOM	5307	O2P	THY	109	28.343	-6.686	43.530	1.00	66.20	BDNA O
ATOM	5308	O5'	THY	109	27.664	-9.005	44.189	1.00	65.44	BDNA O
ATOM	5309	N1	THY	109	23.168	-7.579	42.115	1.00	46.13	BDNA N
ATOM	5310	C6	THY	109	24.030	-6.506	42.019	1.00	43.34	BDNA C
ATOM	5311	C2	THY	109	21.800	-7.399	42.048	1.00	43.26	BDNA C
ATOM	5312	O2	THY	109	21.000	-8.316	42.096	1.00	41.82	BDNA O
ATOM	5313	N3	THY	109	21.400	-6.091	41.913	1.00	40.45	BDNA N
ATOM	5314	C4	THY	109	22.207	-4.974	41.826	1.00	39.56	BDNA C
ATOM	5315	O4	THY	109	21.701	-3.855	41.721	1.00	37.70	BDNA O
ATOM	5316	C5	THY	109	23.623	-5.235	41.873	1.00	40.61	BDNA C
ATOM	5317	CSA	THY	109	24.570	-4.082	41.754	1.00	41.75	BDNA C
ATOM	5318	C2'	THY	109	24.354	-9.521	41.065	1.00	53.69	BDNA C
ATOM	5319	C5'	THY	109	27.093	-9.132	42.891	1.00	61.06	BDNA C
ATOM	5320	C4'	THY	109	25.767	-9.851	42.973	1.00	56.61	BDNA C
ATOM	5321	O4'	THY	109	24.702	-8.918	43.302	1.00	53.92	BDNA O
ATOM	5322	C1'	THY	109	23.690	-8.952	42.299	1.00	49.35	BDNA C
ATOM	5323	C3'	THY	109	25.364	-10.492	41.650	1.00	56.87	BDNA C
ATOM	5324	O3'	THY	109	24.784	-11.769	41.905	1.00	56.71	BDNA O

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ATOM	5325	P	THY	110	24.547	-12.787	40.692	1.00	58.34	BDNA P
ATOM	5326	O1P	THY	110	24.620	-14.155	41.270	1.00	57.44	BDNA O
ATOM	5327	O2P	THY	110	25.444	-12.413	39.563	1.00	57.72	BDNA O
ATOM	5328	O5'	THY	110	23.038	-12.497	40.272	1.00	53.80	BDNA O
ATOM	5329	N1	THY	110	20.638	-9.287	38.762	1.00	33.40	BDNA N
ATOM	5330	C6	THY	110	21.981	-9.063	38.561	1.00	29.78	BDNA C
ATOM	5331	C2	THY	110	19.724	-8.258	38.682	1.00	31.89	BDNA C
ATOM	5332	O2	THY	110	18.519	-8.422	38.778	1.00	34.31	BDNA O
ATOM	5333	N3	THY	110	20.269	-7.023	38.477	1.00	29.71	BDNA N
ATOM	5334	C4	THY	110	21.599	-6.715	38.325	1.00	30.33	BDNA C
ATOM	5335	O4	THY	110	21.939	-5.542	38.214	1.00	32.76	BDNA O
ATOM	5336	C5	THY	110	22.499	-7.847	38.335	1.00	31.39	BDNA C
ATOM	5337	C5A	THY	110	23.955	-7.616	38.085	1.00	31.31	BDNA C
ATOM	5338	C2'	THY	110	20.610	-11.801	38.273	1.00	42.10	BDNA C
ATOM	5339	C5'	THY	110	21.984	-12.720	41.203	1.00	48.12	BDNA C
ATOM	5340	C4'	THY	110	20.653	-12.355	40.593	1.00	44.99	BDNA C
ATOM	5341	O4'	THY	110	20.553	-10.921	40.429	1.00	40.27	BDNA O
ATOM	5342	C1'	THY	110	20.128	-10.629	39.111	1.00	38.19	BDNA C
ATOM	5343	C3'	THY	110	20.359	-12.964	39.222	1.00	43.49	BDNA C
ATOM	5344	O3'	THY	110	18.981	-13.368	39.188	1.00	46.49	BDNA O
ATOM	5345	P	CYT	111	18.532	-14.638	38.302	1.00	50.99	BDNA P
ATOM	5346	O1P	CYT	111	19.690	-15.563	38.186	1.00	51.80	BDNA O
ATOM	5347	O2P	CYT	111	17.234	-15.142	38.830	1.00	48.34	BDNA O
ATOM	5348	O5'	CYT	111	18.261	-14.016	36.864	1.00	47.69	BDNA O
ATOM	5349	N1	CYT	111	18.340	-9.370	35.094	1.00	24.70	BDNA N
ATOM	5350	C6	CYT	111	19.529	-10.035	35.006	1.00	27.92	BDNA C
ATOM	5351	C2	CYT	111	18.314	-7.982	35.147	1.00	25.67	BDNA C
ATOM	5352	O2	CYT	111	17.213	-7.405	35.209	1.00	25.25	BDNA O
ATOM	5353	N3	CYT	111	19.481	-7.297	35.130	1.00	25.86	BDNA N
ATOM	5354	C4	CYT	111	20.637	-7.956	35.043	1.00	26.06	BDNA C
ATOM	5355	N4	CYT	111	21.764	-7.248	34.998	1.00	26.88	BDNA N
ATOM	5356	C5	CYT	111	20.690	-9.375	34.990	1.00	28.97	BDNA C
ATOM	5357	C2'	CYT	111	17.000	-11.296	34.177	1.00	33.60	BDNA C
ATOM	5358	C5'	CYT	111	18.296	-12.614	36.685	1.00	43.13	BDNA C
ATOM	5359	C4'	CYT	111	16.909	-12.085	36.411	1.00	39.80	BDNA C
ATOM	5360	O4'	CYT	111	16.970	-10.647	36.460	1.00	33.12	BDNA O
ATOM	5361	C1'	CYT	111	17.073	-10.114	35.150	1.00	30.89	BDNA C
ATOM	5362	C3'	CYT	111	16.403	-12.413	35.014	1.00	37.09	BDNA C
ATOM	5363	O3'	CYT	111	14.971	-12.403	35.008	1.00	37.56	BDNA O
ATOM	5364	P	CYT	112	14.176	-12.860	33.689	1.00	40.08	BDNA P
ATOM	5365	O1P	CYT	112	12.866	-13.447	34.082	1.00	41.73	BDNA O
ATOM	5366	O2P	CYT	112	15.104	-13.641	32.827	1.00	37.73	BDNA O
ATOM	5367	O5'	CYT	112	13.883	-11.485	32.959	1.00	38.36	BDNA O
ATOM	5368	N1	CYT	112	17.418	-8.835	31.112	1.00	26.27	BDNA N
ATOM	5369	C6	CYT	112	18.114	-10.008	31.180	1.00	25.79	BDNA C
ATOM	5370	C2	CYT	112	18.036	-7.626	31.453	1.00	24.34	BDNA C
ATOM	5371	O2	CYT	112	17.341	-6.596	31.526	1.00	24.57	BDNA O
ATOM	5372	N3	CYT	112	19.364	-7.612	31.697	1.00	22.56	BDNA N
ATOM	5373	C4	CYT	112	20.060	-8.746	31.659	1.00	23.71	BDNA C
ATOM	5374	N4	CYT	112	21.389	-8.669	31.812	1.00	22.56	BDNA N
ATOM	5375	C5	CYT	112	19.430	-10.011	31.449	1.00	26.48	BDNA C
ATOM	5376	C2'	CYT	112	15.765	-9.739	29.485	1.00	25.30	BDNA C
ATOM	5377	C5'	CYT	112	14.034	-11.398	31.572	1.00	32.20	BDNA C
ATOM	5378	C4'	CYT	112	14.053	-9.959	31.126	1.00	29.64	BDNA C
ATOM	5379	O4'	CYT	112	15.180	-9.236	31.697	1.00	30.03	BDNA O
ATOM	5380	C1'	CYT	112	16.029	-8.803	30.645	1.00	26.78	BDNA C
ATOM	5381	C3'	CYT	112	14.275	-9.947	29.623	1.00	24.47	BDNA C
ATOM	5382	O3'	CYT	112	13.541	-8.899	29.020	1.00	20.85	BDNA O
ATOM	5383	P	ADE	113	12.940	-9.132	27.569	1.00	17.46	BDNA P
ATOM	5384	O1P	ADE	113	11.474	-9.087	27.704	1.00	18.58	BDNA O
ATOM	5385	O2P	ADE	113	13.587	-10.325	26.983	1.00	15.22	BDNA O
ATOM	5386	O5'	ADE	113	13.405	-7.854	26.752	1.00	20.25	BDNA O
ATOM	5387	N9	ADE	113	18.043	-5.403	24.794	1.00	16.78	BDNA N
ATOM	5388	C4	ADE	113	19.063	-4.485	24.909	1.00	13.48	BDNA C
ATOM	5389	N3	ADE	113	18.951	-3.167	25.116	1.00	11.73	BDNA N
ATOM	5390	C2	ADE	113	20.156	-2.592	25.171	1.00	14.95	BDNA C
ATOM	5391	N1	ADE	113	21.369	-3.154	25.054	1.00	12.30	BDNA N
ATOM	5392	C6	ADE	113	21.442	-4.490	24.857	1.00	13.43	BDNA C
ATOM	5393	N6	ADE	113	22.642	-5.061	24.773	1.00	7.91	BDNA N
ATOM	5394	C5	ADE	113	20.236	-5.204	24.765	1.00	14.78	BDNA C
ATOM	5395	N7	ADE	113	19.963	-6.543	24.537	1.00	16.14	BDNA N
ATOM	5396	C8	ADE	113	18.654	-6.609	24.560	1.00	17.54	BDNA C
ATOM	5397	C2'	ADE	113	15.698	-5.836	23.933	1.00	11.94	BDNA C
ATOM	5398	C5'	ADE	113	14.774	-7.485	26.656	1.00	17.81	BDNA C
ATOM	5399	C4'	ADE	113	14.857	-6.067	26.150	1.00	16.88	BDNA C
ATOM	5400	O4'	ADE	113	16.205	-5.543	26.205	1.00	15.26	BDNA O

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ATOM	5401	C1'	ADE	113	16.612	-5.121	24.919	1.00	14.17	BDNA	C
ATOM	5402	C3'	ADE	113	14.391	-5.910	24.706	1.00	14.21	BDNA	C
ATOM	5403	O3'	ADE	113	13.608	-4.708	24.626	1.00	16.23	BDNA	O
ATOM	5404	P	ADE	114	13.056	-4.198	23.213	1.00	12.54	BDNA	P
ATOM	5405	O1P	ADE	114	11.757	-3.551	23.526	1.00	15.17	BDNA	O
ATOM	5406	O2P	ADE	114	13.124	-5.302	22.231	1.00	11.42	BDNA	O
ATOM	5407	O5'	ADE	114	14.077	-3.063	22.770	1.00	15.65	BDNA	O
ATOM	5408	N9	ADE	114	18.136	-2.647	21.636	1.00	14.86	BDNA	N
ATOM	5409	C4	ADE	114	19.492	-2.447	21.704	1.00	14.18	BDNA	C
ATOM	5410	N3	ADE	114	20.135	-1.277	21.861	1.00	14.38	BDNA	N
ATOM	5411	C2	ADE	114	21.454	-1.467	21.871	1.00	12.01	BDNA	C
ATOM	5412	N1	ADE	114	22.142	-2.607	21.745	1.00	11.56	BDNA	N
ATOM	5413	C6	ADE	114	21.464	-3.757	21.588	1.00	10.71	BDNA	C
ATOM	5414	N6	ADE	114	22.150	-4.897	21.445	1.00	5.26	BDNA	N
ATOM	5415	C5	ADE	114	20.062	-3.691	21.571	1.00	10.26	BDNA	C
ATOM	5416	N7	ADE	114	19.088	-4.665	21.446	1.00	12.05	BDNA	N
ATOM	5417	C8	ADE	114	17.964	-3.995	21.492	1.00	15.68	BDNA	C
ATOM	5418	C2'	ADE	114	15.957	-1.716	20.757	1.00	17.00	BDNA	C
ATOM	5419	C5'	ADE	114	14.240	-1.884	23.563	1.00	10.16	BDNA	C
ATOM	5420	C4'	ADE	114	15.258	-0.977	22.918	1.00	16.84	BDNA	C
ATOM	5421	O4'	ADE	114	16.592	-1.549	22.996	1.00	14.41	BDNA	O
ATOM	5422	C1'	ADE	114	17.141	-1.586	21.691	1.00	14.02	BDNA	C
ATOM	5423	C3'	ADE	114	14.988	-0.757	21.428	1.00	18.65	BDNA	C
ATOM	5424	O3'	ADE	114	15.361	0.573	21.111	1.00	20.52	BDNA	O
ATOM	5425	P	GUA	115	14.411	1.462	20.185	1.00	19.62	BDNA	P
ATOM	5426	O1P	GUA	115	13.359	2.033	21.061	1.00	21.52	BDNA	O
ATOM	5427	O2P	GUA	115	14.033	0.697	18.972	1.00	19.22	BDNA	O
ATOM	5428	O5'	GUA	115	15.395	2.604	19.705	1.00	23.00	BDNA	O
ATOM	5429	N9	GUA	115	19.844	-0.051	18.950	1.00	15.34	BDNA	N
ATOM	5430	C4	GUA	115	21.045	-0.697	18.807	1.00	11.46	BDNA	C
ATOM	5431	N3	GUA	115	22.259	-0.128	18.906	1.00	12.77	BDNA	N
ATOM	5432	C2	GUA	115	23.236	-0.987	18.679	1.00	13.27	BDNA	C
ATOM	5433	N2	GUA	115	24.510	-0.553	18.691	1.00	9.74	BDNA	N
ATOM	5434	N1	GUA	115	23.035	-2.320	18.413	1.00	11.74	BDNA	N
ATOM	5435	C6	GUA	115	21.788	-2.933	18.335	1.00	10.57	BDNA	C
ATOM	5436	O6	GUA	115	21.711	-4.133	18.133	1.00	9.91	BDNA	O
ATOM	5437	C5	GUA	115	20.730	-2.002	18.533	1.00	14.34	BDNA	C
ATOM	5438	N7	GUA	115	19.354	-2.179	18.497	1.00	14.52	BDNA	N
ATOM	5439	C8	GUA	115	18.870	-0.996	18.759	1.00	13.20	BDNA	C
ATOM	5440	C2'	GUA	115	19.675	2.079	17.863	1.00	24.73	BDNA	C
ATOM	5441	C5'	GUA	115	16.337	2.325	18.691	1.00	22.03	BDNA	C
ATOM	5442	C4'	GUA	115	17.719	2.723	19.138	1.00	23.23	BDNA	C
ATOM	5443	O4'	GUA	115	18.377	1.583	19.764	1.00	19.87	BDNA	O
ATOM	5444	C1'	GUA	115	19.668	1.378	19.206	1.00	19.43	BDNA	C
ATOM	5445	C3'	GUA	115	18.546	3.081	17.912	1.00	22.48	BDNA	C
ATOM	5446	O3'	GUA	115	19.029	4.408	17.928	1.00	22.74	BDNA	O
ATOM	5447	P	THY	116	19.363	5.107	16.536	1.00	19.00	BDNA	P
ATOM	5448	O1P	THY	116	19.208	6.569	16.719	1.00	24.58	BDNA	O
ATOM	5449	O2P	THY	116	18.626	4.421	15.463	1.00	17.52	BDNA	O
ATOM	5450	O5'	THY	116	20.906	4.789	16.345	1.00	20.94	BDNA	O
ATOM	5451	N1	THY	116	23.260	1.561	15.561	1.00	13.45	BDNA	N
ATOM	5452	C6	THY	116	21.894	1.476	15.475	1.00	14.24	BDNA	C
ATOM	5453	C2	THY	116	24.048	0.427	15.455	1.00	13.20	BDNA	C
ATOM	5454	O2	THY	116	25.263	0.442	15.517	1.00	14.45	BDNA	O
ATOM	5455	N3	THY	116	23.347	-0.738	15.273	1.00	10.57	BDNA	N
ATOM	5456	C4	THY	116	21.983	-0.882	15.187	1.00	11.09	BDNA	C
ATOM	5457	O4	THY	116	21.491	-1.989	15.052	1.00	11.08	BDNA	O
ATOM	5458	C5	THY	116	21.230	0.331	15.277	1.00	12.45	BDNA	C
ATOM	5459	C5A	THY	116	19.743	0.264	15.135	1.00	12.40	BDNA	C
ATOM	5460	C2'	THY	116	23.542	3.919	14.689	1.00	13.03	BDNA	C
ATOM	5461	C5'	THY	116	21.847	5.231	17.311	1.00	15.45	BDNA	C
ATOM	5462	C4'	THY	116	23.244	4.853	16.885	1.00	16.60	BDNA	C
ATOM	5463	O4'	THY	116	23.448	3.420	16.990	1.00	11.86	BDNA	O
ATOM	5464	C1'	THY	116	23.909	2.886	15.757	1.00	13.75	BDNA	C
ATOM	5465	C3'	THY	116	23.578	5.240	15.446	1.00	16.64	BDNA	C
ATOM	5466	O3'	THY	116	24.870	5.833	15.437	1.00	17.99	BDNA	O
ATOM	5467	P	CYT	117	25.402	3.563	14.120	1.00	21.29	BDNA	P
ATOM	5468	O1P	CYT	117	26.355	7.593	14.587	1.00	22.29	BDNA	O
ATOM	5469	O2P	CYT	117	24.272	6.950	13.245	1.00	19.74	BDNA	O
ATOM	5470	O5'	CYT	117	26.251	5.419	13.422	1.00	19.62	BDNA	O
ATOM	5471	N1	CYT	117	25.570	1.242	12.066	1.00	21.02	BDNA	N
ATOM	5472	C6	CYT	117	24.397	1.923	11.915	1.00	23.55	BDNA	C
ATOM	5473	C2	CYT	117	25.565	-0.159	12.156	1.00	19.23	BDNA	C
ATOM	5474	O2	CYT	117	26.639	-0.757	12.311	1.00	20.69	BDNA	O
ATOM	5475	N3	CYT	117	24.395	-0.823	12.073	1.00	16.28	BDNA	N
ATOM	5476	C4	CYT	117	23.257	-0.149	11.913	1.00	14.69	BDNA	C



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ATOM	5477	N4	CYT	117	22.126	-0.849	11.816	1.00	15.74	BDNA	N
ATOM	5478	C5	CYT	117	23.226	1.273	11.842	1.00	19.44	BDNA	C
ATOM	5479	C2'	CYT	117	27.067	3.104	11.167	1.00	24.58	BDNA	C
ATOM	5480	C5'	CYT	117	27.315	4.819	14.134	1.00	21.72	BDNA	C
ATOM	5481	C4'	CYT	117	27.872	3.653	13.360	1.00	27.03	BDNA	C
ATOM	5482	O4'	CYT	117	26.963	2.532	13.420	1.00	21.69	BDNA	O
ATOM	5483	C1'	CYT	117	26.860	1.953	12.138	1.00	22.91	BDNA	C
ATOM	5484	C3'	CYT	117	28.146	3.913	11.875	1.00	27.26	BDNA	C
ATOM	5485	O3'	CYT	117	29.457	3.421	11.603	1.00	34.12	BDNA	O
ATOM	5486	P	THY	118	30.068	3.487	10.120	1.00	37.42	BDNA	P
ATOM	5487	O1P	THY	118	31.439	4.026	10.294	1.00	38.99	BDNA	O
ATOM	5488	O2P	THY	118	29.124	4.144	9.174	1.00	34.24	BDNA	O
ATOM	5489	O5'	THY	118	30.218	1.946	9.753	1.00	35.13	BDNA	O
ATOM	5490	N1	THY	118	27.790	-1.230	8.620	1.00	25.53	BDNA	N
ATOM	5491	C6	THY	118	27.268	0.043	8.585	1.00	24.39	BDNA	C
ATOM	5492	C2	THY	118	26.987	-2.337	8.488	1.00	22.88	BDNA	C
ATOM	5493	O2	THY	118	27.419	-3.471	8.447	1.00	25.21	BDNA	O
ATOM	5494	N3	THY	118	25.645	-2.061	8.397	1.00	22.87	BDNA	N
ATOM	5495	C4	THY	118	25.049	-0.815	8.410	1.00	23.17	BDNA	C
ATOM	5496	O4	THY	118	23.831	-0.722	8.376	1.00	24.79	BDNA	O
ATOM	5497	C5	THY	118	25.961	0.304	8.484	1.00	24.39	BDNA	C
ATOM	5498	C5A	THY	118	25.412	1.696	8.444	1.00	27.29	BDNA	C
ATOM	5499	C2'	THY	118	30.133	-0.668	7.883	1.00	32.56	BDNA	C
ATOM	5500	C5'	THY	118	30.828	1.055	10.686	1.00	35.54	BDNA	C
ATOM	5501	C4'	THY	118	30.855	-0.355	10.143	1.00	37.50	BDNA	C
ATOM	5502	O4'	THY	118	29.524	-0.922	10.130	1.00	33.84	BDNA	O
ATOM	5503	C1'	THY	118	29.226	-1.426	8.837	1.00	31.14	BDNA	C
ATOM	5504	C3'	THY	118	31.390	-0.492	8.719	1.00	38.16	BDNA	C
ATOM	5505	O3'	THY	118	32.228	-1.650	8.651	1.00	42.78	BDNA	O
ATOM	5506	P	THY	119	32.869	-2.094	7.247	1.00	45.19	BDNA	P
ATOM	5507	O1P	THY	119	34.214	-2.627	7.564	1.00	47.82	BDNA	O
ATOM	5508	O2P	THY	119	32.723	-0.995	6.259	1.00	43.91	BDNA	O
ATOM	5509	O5'	THY	119	31.942	-3.306	6.796	1.00	43.29	BDNA	O
ATOM	5510	N1	THY	119	27.920	-4.181	5.363	1.00	30.82	BDNA	N
ATOM	5511	C6	THY	119	28.271	-2.853	5.347	1.00	29.11	BDNA	C
ATOM	5512	C2	THY	119	26.603	-4.574	5.179	1.00	31.26	BDNA	C
ATOM	5513	O2	THY	119	26.247	-5.741	5.118	1.00	29.08	BDNA	O
ATOM	5514	N3	THY	119	25.711	-3.536	5.060	1.00	27.66	BDNA	N
ATOM	5515	C4	THY	119	25.997	-2.183	5.090	1.00	29.66	BDNA	C
ATOM	5516	O4	THY	119	25.082	-1.359	5.042	1.00	30.76	BDNA	O
ATOM	5517	C5	THY	119	27.396	-1.853	5.206	1.00	28.40	BDNA	C
ATOM	5518	C5A	THY	119	27.806	-0.416	5.153	1.00	32.58	BDNA	C
ATOM	5519	C2'	THY	119	30.198	-5.146	4.746	1.00	38.73	BDNA	C
ATOM	5520	C5'	THY	119	31.632	-4.351	7.716	1.00	41.60	BDNA	C
ATOM	5521	C4'	THY	119	30.806	-5.420	7.043	1.00	40.73	BDNA	C
ATOM	5522	O4'	THY	119	29.418	-5.029	6.941	1.00	38.90	BDNA	O
ATOM	5523	C1'	THY	119	28.952	-5.214	5.616	1.00	36.06	BDNA	C
ATOM	5524	C3'	THY	119	31.250	-5.795	5.633	1.00	42.03	BDNA	C
ATOM	5525	O3'	THY	119	31.223	-7.218	5.523	1.00	48.23	BDNA	O
ATOM	5526	P	THY	120	32.134	-7.960	4.427	1.00	51.67	BDNA	P
ATOM	5527	O1P	THY	120	32.824	-9.070	5.137	1.00	52.32	BDNA	O
ATOM	5528	O2P	THY	120	32.931	-6.957	3.679	1.00	50.83	BDNA	O
ATOM	5529	O5'	THY	120	31.042	-8.561	3.444	1.00	49.72	BDNA	O
ATOM	5530	N1	THY	120	26.350	-6.929	2.224	1.00	29.22	BDNA	N
ATOM	5531	C6	THY	120	27.371	-6.019	2.071	1.00	24.83	BDNA	C
ATOM	5532	C2	THY	120	25.038	-6.555	2.110	1.00	29.77	BDNA	C
ATOM	5533	O2	THY	120	24.109	-7.344	2.214	1.00	31.56	BDNA	O
ATOM	5534	N3	THY	120	24.846	-5.213	1.872	1.00	28.99	BDNA	N
ATOM	5535	C4	THY	120	25.820	-4.241	1.742	1.00	26.18	BDNA	C
ATOM	5536	O4	THY	120	25.496	-3.066	1.566	1.00	29.41	BDNA	O
ATOM	5537	C5	THY	120	27.179	-4.717	1.841	1.00	24.31	BDNA	C
ATOM	5538	C5A	THY	120	28.305	-3.743	1.684	1.00	22.12	BDNA	C
ATOM	5539	C2'	THY	120	27.476	-9.049	1.477	1.00	40.57	BDNA	C
ATOM	5540	C5'	THY	120	29.751	-7.966	3.389	1.00	48.11	BDNA	C
ATOM	5541	C4'	THY	120	28.675	-9.014	3.537	1.00	45.17	BDNA	C
ATOM	5542	O4'	THY	120	27.415	-8.341	3.746	1.00	40.02	BDNA	O
ATOM	5543	C1'	THY	120	26.648	-8.338	2.544	1.00	37.12	BDNA	C
ATOM	5544	C3'	THY	120	28.483	-9.855	2.280	1.00	46.35	BDNA	C
ATOM	5545	O3'	THY	120	27.998	-11.154	2.632	1.00	49.37	BDNA	O
ATOM	5546	P	THY	121	27.490	-12.154	1.484	1.00	54.14	BDNA	P
ATOM	5547	O1P	THY	121	27.632	-13.530	2.023	1.00	54.58	BDNA	O
ATOM	5548	O2P	THY	121	28.144	-11.800	0.199	1.00	53.49	BDNA	O
ATOM	5549	O5'	THY	121	25.939	-11.810	1.369	1.00	54.10	BDNA	O
ATOM	5550	N1	THY	121	23.488	-8.442	-0.656	1.00	40.66	BDNA	N
ATOM	5551	C6	THY	121	24.856	-8.435	-0.827	1.00	38.35	BDNA	C
ATOM	5552	C2	THY	121	22.744	-7.288	-0.800	1.00	37.86	BDNA	C

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ATOM	5553	O2	THY	121	21.529	-7.247	-0.649	1.00	35.98	BDNA	O
ATOM	5554	N3	THY	121	23.484	-6.173	-1.128	1.00	34.51	BDNA	N
ATOM	5555	C4	THY	121	24.856	-6.104	-1.309	1.00	34.48	BDNA	C
ATOM	5556	O4	THY	121	25.386	-5.034	-1.583	1.00	36.86	BDNA	O
ATOM	5557	C5	THY	121	25.563	-7.346	-1.140	1.00	33.83	BDNA	C
ATOM	5558	C5A	THY	121	27.047	-7.367	-1.322	1.00	36.58	BDNA	C
ATOM	5559	C2'	THY	121	22.763	-10.655	-1.518	1.00	52.67	BDNA	C
ATOM	5560	C5'	THY	121	25.223	-12.075	0.174	1.00	53.91	BDNA	C
ATOM	5561	C4'	THY	121	23.754	-11.775	0.363	1.00	54.13	BDNA	C
ATOM	5562	O4'	THY	121	23.578	-10.370	0.677	1.00	51.00	BDNA	O
ATOM	5563	C1'	THY	121	22.807	-9.712	-0.325	1.00	47.18	BDNA	C
ATOM	5564	C3'	THY	121	22.945	-12.030	-0.905	1.00	55.46	BDNA	C
ATOM	5565	O3'	THY	121	21.693	-12.643	-0.613	1.00	59.58	BDNA	O
ATOM	5566	P	THY	122	20.934	-13.456	-1.771	1.00	63.44	BDNA	P
ATOM	5567	O1P	THY	122	20.054	-14.461	-1.114	1.00	62.72	BDNA	O
ATOM	5568	O2P	THY	122	21.964	-13.903	-2.752	1.00	60.39	BDNA	O
ATOM	5569	O5'	THY	122	20.013	-12.350	-2.462	1.00	62.16	BDNA	O
ATOM	5570	N1	THY	122	20.682	-8.370	-3.945	1.00	47.15	BDNA	N
ATOM	5571	C6	THY	122	21.853	-9.095	-3.950	1.00	44.43	BDNA	C
ATOM	5572	C2	THY	122	20.692	-6.996	-4.052	1.00	45.69	BDNA	C
ATOM	5573	O2	THY	122	19.679	-6.315	-4.017	1.00	47.00	BDNA	O
ATOM	5574	N3	THY	122	21.935	-6.444	-4.198	1.00	41.97	BDNA	N
ATOM	5575	C4	THY	122	23.142	-7.107	-4.240	1.00	41.78	BDNA	C
ATOM	5576	O4	THY	122	24.179	-6.472	-4.397	1.00	39.64	BDNA	O
ATOM	5577	C5	THY	122	23.064	-8.542	-4.096	1.00	42.15	BDNA	C
ATOM	5578	C5A	THY	122	24.326	-9.343	-4.123	1.00	43.38	BDNA	C
ATOM	5579	C2'	THY	122	19.200	-10.270	-4.724	1.00	54.21	BDNA	C
ATOM	5580	C5'	THY	122	18.908	-11.777	-1.756	1.00	58.65	BDNA	C
ATOM	5581	C4'	THY	122	18.298	-10.643	-2.549	1.00	56.78	BDNA	C
ATOM	5582	O4'	THY	122	19.166	-9.479	-2.524	1.00	53.70	BDNA	O
ATOM	5583	C1'	THY	122	19.367	-9.035	-3.856	1.00	51.43	BDNA	C
ATOM	5584	C3'	THY	122	18.033	-10.945	-4.029	1.00	56.38	BDNA	C
ATOM	5585	O3'	THY	122	16.875	-10.241	-4.501	1.00	57.22	BDNA	O
ATOM	5586	OH2	TIP	S 1	48.347	-16.506	25.833	1.00	25.82	S	O
ATOM	5587	OH2	TIP	S 2	25.816	-8.244	6.801	1.00	23.76	S	O
ATOM	5588	OH2	TIP	S 3	17.877	-11.128	25.882	1.00	28.20	S	O
ATOM	5589	OH2	TIP	S 4	6.515	8.149	18.872	1.00	42.36	S	O
ATOM	5590	OH2	TIP	S 5	21.512	-19.881	15.709	1.00	23.03	S	O
ATOM	5591	OH2	TIP	S 6	34.056	-0.772	23.463	1.00	18.74	S	O
ATOM	5592	OH2	TIP	S 7	4.423	-30.916	24.658	1.00	31.83	S	O
ATOM	5593	OH2	TIP	S 8	34.558	-9.268	22.326	1.00	24.66	S	O
ATOM	5594	OH2	TIP	S 9	9.696	-15.414	31.153	1.00	21.74	S	O
ATOM	5595	OH2	TIP	S 10	18.004	-20.744	26.800	1.00	26.83	S	O
ATOM	5596	OH2	TIP	S 11	39.405	17.487	32.090	1.00	26.16	S	O
ATOM	5597	OH2	TIP	S 12	33.939	10.869	32.925	1.00	22.39	S	O
ATOM	5598	OH2	TIP	S 13	30.482	-24.886	26.152	1.00	16.34	S	O
ATOM	5599	OH2	TIP	S 14	20.295	-22.808	27.038	1.00	22.73	S	O
ATOM	5600	OH2	TIP	S 15	28.482	-5.870	9.568	1.00	27.70	S	O
ATOM	5601	OH2	TIP	S 16	38.540	17.335	34.673	1.00	18.82	S	O
ATOM	5602	OH2	TIP	S 17	-4.731	-15.661	24.291	1.00	23.58	S	O
ATOM	5603	OH2	TIP	S 18	38.666	-22.415	21.287	1.00	21.16	S	O
ATOM	5604	OH2	TIP	S 19	22.976	9.124	32.437	1.00	16.45	S	O
ATOM	5605	OH2	TIP	S 20	10.145	-22.877	34.359	1.00	33.46	S	O
ATOM	5606	OH2	TIP	S 21	28.607	0.349	28.931	1.00	43.10	S	O
ATOM	5607	OH2	TIP	S 22	32.382	8.660	33.551	1.00	29.46	S	O
ATOM	5608	OH2	TIP	S 23	35.621	-0.738	27.760	1.00	21.85	S	O
ATOM	5609	OH2	TIP	S 24	41.992	-3.375	31.693	1.00	26.39	S	O
ATOM	5610	OH2	TIP	S 25	35.463	3.568	18.768	1.00	32.33	S	O
ATOM	5611	OH2	TIP	S 26	4.671	18.101	19.490	1.00	29.42	S	O
ATOM	5612	OH2	TIP	S 27	34.515	-0.057	45.603	1.00	37.67	S	O
ATOM	5613	OH2	TIP	S 28	25.564	1.019	30.313	1.00	26.88	S	O
ATOM	5614	OH2	TIP	S 29	15.159	-28.515	29.497	1.00	25.26	S	O
ATOM	5615	OH2	TIP	S 30	15.402	14.504	39.088	1.00	30.29	S	O
ATOM	5616	OH2	TIP	S 31	17.855	-4.070	17.417	1.00	32.87	S	O
ATOM	5617	OH2	TIP	S 32	29.613	-2.839	13.876	1.00	28.23	S	O
ATOM	5618	OH2	TIP	S 33	32.363	21.997	45.484	1.00	36.17	S	O
ATOM	5619	OH2	TIP	S 34	21.913	-15.491	46.375	1.00	56.25	S	O
ATOM	5620	OH2	TIP	S 35	51.766	-4.414	31.051	1.00	38.30	S	O
ATOM	5621	OH2	TIP	S 36	15.978	7.877	25.383	1.00	35.69	S	O
ATOM	5622	OH2	TIP	S 37	44.988	17.342	27.804	1.00	34.32	S	O
ATOM	5623	OH2	TIP	S 38	14.212	-7.696	21.034	1.00	33.01	S	O
ATOM	5624	OH2	TIP	S 39	-3.183	-16.620	20.050	1.00	25.42	S	O
ATOM	5625	OH2	TIP	S 40	35.505	-4.229	20.639	1.00	33.80	S	O
ATOM	5626	OH2	TIP	S 41	53.227	-3.463	21.446	1.00	30.66	S	O
ATOM	5627	OH2	TIP	S 42	17.981	12.728	-0.955	1.00	41.14	S	O
ATOM	5628	OH2	TIP	S 43	23.075	5.396	11.799	1.00	25.37	S	O

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ATOM	5629	OH2	TIP	S	44	23.338	-8.610	19.478	1.00	28.40	S	O
ATOM	5630	OH2	TIP	S	45	36.561	1.968	28.558	1.00	28.03	S	O
ATOM	5631	OH2	TIP	S	46	22.934	8.526	17.379	1.00	23.27	S	O
ATOM	5632	OH2	TIP	S	47	-3.145	-24.250	16.300	1.00	49.17	S	O
ATOM	5633	OH2	TIP	S	48	8.822	8.675	29.566	1.00	28.47	S	O
ATOM	5634	OH2	TIP	S	49	29.184	-10.623	25.998	1.00	32.67	S	O
ATOM	5635	OH2	TIP	S	50	8.336	-15.805	33.458	1.00	23.66	S	O
ATOM	5636	OH2	TIP	S	51	25.461	-6.652	30.738	1.00	44.47	S	O
ATOM	5637	OH2	TIP	S	52	36.879	19.957	34.240	1.00	28.58	S	O
ATOM	5638	OH2	TIP	S	53	30.447	-30.092	16.971	1.00	27.87	S	O
ATOM	5639	OH2	TIP	S	54	16.487	6.715	17.760	1.00	18.14	S	O
ATOM	5640	OH2	TIP	S	55	-12.643	-25.546	25.911	1.00	34.35	S	O
ATOM	5641	OH2	TIP	S	56	46.839	-2.488	21.821	1.00	43.62	S	O
ATOM	5642	OH2	TIP	S	57	21.905	-9.503	3.577	1.00	45.10	S	O
ATOM	5643	OH2	TIP	S	58	30.641	-8.182	26.251	1.00	45.24	S	O
ATOM	5644	OH2	TIP	S	59	18.976	-9.953	42.791	1.00	33.66	S	O
ATOM	5645	OH2	TIP	S	60	42.986	-18.902	12.909	1.00	34.55	S	O
ATOM	5646	OH2	TIP	S	61	22.845	-8.690	15.365	1.00	22.70	S	O
ATOM	5647	OH2	TIP	S	62	21.423	4.608	36.586	1.00	38.13	S	O
ATOM	5648	OH2	TIP	S	63	28.819	2.830	6.680	1.00	39.34	S	O
ATOM	5649	OH2	TIP	S	64	24.598	-7.179	23.822	1.00	36.90	S	O
ATOM	5650	OH2	TIP	S	65	12.464	-23.385	32.605	1.00	32.83	S	O
ATOM	5651	OH2	TIP	S	66	19.248	19.041	71.952	1.00	35.05	S	O
ATOM	5652	OH2	TIP	S	67	20.739	-6.669	15.517	1.00	31.89	S	O
ATOM	5653	OH2	TIP	S	68	41.270	-8.404	24.054	1.00	21.90	S	O
ATOM	5654	OH2	TIP	S	69	16.393	18.373	38.881	1.00	42.99	S	O
ATOM	5655	OH2	TIP	S	70	-6.667	-17.584	24.112	1.00	20.02	S	O
ATOM	5656	OH2	TIP	S	71	-12.050	-28.092	25.023	1.00	36.19	S	O
ATOM	5657	OH2	TIP	S	72	5.123	11.270	22.959	1.00	39.01	S	O
ATOM	5658	OH2	TIP	S	73	41.069	-0.706	31.138	1.00	33.71	S	O
ATOM	5659	OH2	TIP	S	74	38.717	-24.986	24.308	1.00	22.72	S	O
ATOM	5660	OH2	TIP	S	75	30.108	22.755	22.380	1.00	42.66	S	O
ATOM	5661	OH2	TIP	S	76	23.844	-6.683	49.892	1.00	44.03	S	O
ATOM	5662	OH2	TIP	S	77	10.915	-1.965	20.048	1.00	35.03	S	O
ATOM	5663	OH2	TIP	S	78	25.486	16.415	71.766	1.00	32.72	S	O
ATOM	5664	OH2	TIP	S	79	15.891	8.212	20.112	1.00	36.90	S	O
ATOM	5665	OH2	TIP	S	80	4.542	-32.575	36.035	1.00	30.98	S	O
ATOM	5666	OH2	TIP	S	81	-16.947	-20.924	27.557	1.00	38.49	S	O
ATOM	5667	OH2	TIP	S	82	34.449	29.288	47.256	1.00	35.72	S	O
ATOM	5668	OH2	TIP	S	83	27.908	-0.263	16.675	1.00	24.97	S	O
ATOM	5669	OH2	TIP	S	84	33.611	-19.923	28.010	1.00	37.61	S	O
ATOM	5670	OH2	TIP	S	85	45.247	10.492	27.439	1.00	34.10	S	O
ATOM	5671	OH2	TIP	S	86	6.044	2.294	23.340	1.00	32.31	S	O
ATOM	5672	OH2	TIP	S	87	12.860	-26.179	36.135	1.00	30.49	S	O
ATOM	5673	OH2	TIP	S	88	-9.770	-16.014	32.680	1.00	36.65	S	O
ATOM	5674	OH2	TIP	S	89	28.607	21.494	46.206	1.00	38.88	S	O
ATOM	5675	OH2	TIP	S	90	11.027	1.122	23.091	1.00	38.76	S	O
ATOM	5676	OH2	TIP	S	91	28.436	-35.512	21.300	1.00	41.46	S	O
ATOM	5677	OH2	TIP	S	92	12.878	-4.002	19.928	1.00	48.98	S	O
ATOM	5678	OH2	TIP	S	93	13.733	-20.652	32.358	1.00	25.14	S	O
ATOM	5679	OH2	TIP	S	94	19.773	-25.256	28.476	1.00	37.96	S	O
ATOM	5680	OH2	TIP	S	95	11.971	12.285	9.138	1.00	37.01	S	O
ATOM	5681	OH2	TIP	S	96	20.401	7.690	39.370	1.00	40.72	S	O
ATOM	5682	OH2	TIP	S	97	-9.841	-24.297	35.252	1.00	28.27	S	O
ATOM	5683	OH2	TIP	S	98	28.095	-0.448	36.857	1.00	38.79	S	O
ATOM	5684	OH2	TIP	S	99	31.571	-2.911	21.546	1.00	28.12	S	O
ATOM	5685	OH2	TIP	S	100	18.138	26.345	72.881	1.00	34.97	S	O
ATOM	5686	OH2	TIP	S	101	44.456	-9.929	24.793	1.00	22.84	S	O
ATOM	5687	OH2	TIP	S	102	32.374	4.615	27.645	1.00	32.07	S	O
ATOM	5688	OH2	TIP	S	103	29.426	7.473	23.549	1.00	33.27	S	O
ATOM	5689	OH2	TIP	S	104	14.837	4.995	16.362	1.00	51.51	S	O
ATOM	5690	OH2	TIP	S	105	12.207	-17.302	32.442	1.00	44.21	S	O
ATOM	5691	OH2	TIP	S	106	10.860	-10.421	29.970	1.00	23.42	S	O
ATOM	5692	OH2	TIP	S	107	37.596	25.337	41.091	1.00	39.10	S	O
ATOM	5693	OH2	TIP	S	108	24.931	13.645	1.843	1.00	41.16	S	O
ATOM	5694	OH2	TIP	S	109	-3.431	-23.979	39.093	1.00	47.86	S	O
ATOM	5695	OH2	TIP	S	110	35.627	-3.946	17.502	1.00	29.45	S	O
ATOM	5696	OH2	TIP	S	111	42.283	0.620	37.802	1.00	27.77	S	O
ATOM	5697	OH2	TIP	S	112	18.524	-7.574	0.550	1.00	43.27	S	O
ATOM	5698	OH2	TIP	S	113	36.789	15.882	53.503	1.00	40.70	S	O
ATOM	5699	OH2	TIP	S	114	32.759	27.188	8.513	1.00	45.49	S	O
ATOM	5700	OH2	TIP	S	115	33.036	9.053	19.104	1.00	23.00	S	O
ATOM	5701	OH2	TIP	S	116	33.360	-22.601	9.282	1.00	39.77	S	O
ATOM	5702	OH2	TIP	S	117	30.374	21.106	72.595	1.00	36.71	S	O
ATOM	5703	OH2	TIP	S	118	44.759	1.336	35.984	1.00	39.34	S	O
ATOM	5704	OH2	TIP	S	119	30.128	10.207	35.543	1.00	34.15	S	O

ATOM	5705	OH2	TIP	S	120	41.243	-0.230	41.676	1.00	40.20	S	O
ATOM	5706	OH2	TIP	S	121	21.503	-8.596	23.391	1.00	26.66	S	O
ATOM	5707	OH2	TIP	S	122	18.780	14.220	24.022	1.00	32.20	S	O
ATOM	5708	OH2	TIP	S	123	26.553	-2.478	28.942	1.00	30.62	S	O
ATOM	5709	OH2	TIP	S	124	26.631	-6.806	-4.724	1.00	39.19	S	O
ATOM	5710	OH2	TIP	S	125	21.542	-27.869	29.961	1.00	40.39	S	O
ATOM	5711	OH2	TIP	S	126	27.863	22.564	43.384	1.00	47.85	S	O
ATOM	5712	OH2	TIP	S	127	21.230	18.839	40.088	1.00	36.28	S	O
ATOM	5713	OH2	TIP	S	128	20.028	4.888	6.568	1.00	37.13	S	O
ATOM	5714	OH2	TIP	S	129	8.078	-17.324	19.815	1.00	23.79	S	O
ATOM	5715	OH2	TIP	S	130	31.626	-14.200	11.037	1.00	33.99	S	O
ATOM	5716	OH2	TIP	S	131	30.025	20.905	53.716	1.00	48.51	S	O
ATOM	5717	OH2	TIP	S	132	48.723	-9.353	19.582	1.00	45.62	S	O
ATOM	5718	OH2	TIP	S	133	20.327	5.468	26.585	1.00	38.12	S	O
ATOM	5719	OH2	TIP	S	134	27.352	-15.069	32.691	1.00	30.26	S	O
ATOM	5720	OH2	TIP	S	135	32.485	-32.875	14.263	1.00	45.33	S	O
ATOM	5721	OH2	TIP	S	136	28.201	-12.166	33.657	1.00	47.37	S	O
ATOM	5722	OH2	TIP	S	137	30.912	-10.566	9.323	1.00	35.58	S	O
ATOM	5723	OH2	TIP	S	138	15.560	31.485	1.473	1.00	50.67	S	O
ATOM	5724	OH2	TIP	S	139	6.508	-32.966	25.808	1.00	36.59	S	O
ATOM	5725	OH2	TIP	S	140	4.960	-0.698	15.463	1.00	42.85	S	O
ATOM	5726	OH2	TIP	S	141	15.765	-5.263	29.420	1.00	44.62	S	O
ATOM	5727	OH2	TIP	S	142	4.854	-17.226	41.069	1.00	39.31	S	O
ATOM	5728	OH2	TIP	S	143	31.198	6.666	14.972	1.00	39.75	S	O
ATOM	5729	OH2	TIP	S	144	34.432	-4.078	33.835	1.00	39.01	S	O
ATOM	5730	OH2	TIP	S	145	14.834	-2.240	34.474	1.00	42.27	S	O
ATOM	5731	OH2	TIP	S	146	-10.096	-20.020	34.834	1.00	64.91	S	O
ATOM	5732	OH2	TIP	S	147	3.134	-15.852	18.951	1.00	37.84	S	O
ATOM	5733	OH2	TIP	S	148	33.124	6.592	17.082	1.00	27.18	S	O
ATOM	5734	OH2	TIP	S	149	37.697	21.397	38.773	1.00	43.27	S	O
ATOM	5735	OH2	TIP	S	150	23.326	11.482	17.705	1.00	36.64	S	O
ATOM	5736	OH2	TIP	S	151	3.157	-4.405	34.953	1.00	34.52	S	O
ATOM	5737	OH2	TIP	S	152	23.155	6.591	20.131	1.00	43.41	S	O
ATOM	5738	OH2	TIP	S	153	25.491	2.441	18.914	1.00	46.02	S	O
ATOM	5739	OH2	TIP	S	154	15.363	-0.649	17.138	1.00	41.47	S	O
ATOM	5740	OH2	TIP	S	155	23.006	1.918	20.645	1.00	15.58	S	O
ATOM	5741	OH2	TIP	S	156	18.546	-2.174	9.205	1.00	46.97	S	O
ATOM	5742	OH2	TIP	S	157	31.708	4.227	18.887	1.00	34.42	S	O
ATOM	5743	OH2	TIP	S	158	2.427	12.572	21.459	1.00	38.52	S	O
ATOM	5744	OH2	TIP	S	159	23.488	26.268	78.907	1.00	61.27	S	O
ATOM	5745	OH2	TIP	S	160	19.691	-4.640	12.267	1.00	31.42	S	O
ATOM	5746	OH2	TIP	S	161	18.675	5.867	43.173	1.00	43.54	S	O
ATOM	5747	OH2	TIP	S	162	11.340	-6.126	29.871	1.00	39.49	S	O
ATOM	5748	OH2	TIP	S	163	20.399	-15.308	42.953	1.00	50.14	S	O
ATOM	5749	OH2	TIP	S	164	24.733	-10.330	4.870	1.00	32.31	S	O
ATOM	5750	OH2	TIP	S	165	11.246	-23.298	26.531	1.00	59.74	S	O
ATOM	5751	OH2	TIP	S	166	29.632	-9.639	-2.006	1.00	50.51	S	O
ATOM	5752	OH2	TIP	S	167	26.892	-4.898	26.325	1.00	52.08	S	O
ATOM	5753	OH2	TIP	S	168	11.902	-13.332	30.820	1.00	50.53	S	O
ATOM	5754	OH2	TIP	S	169	29.231	1.934	25.480	1.00	34.70	S	O
ATOM	5755	OH2	TIP	S	170	9.166	-9.444	32.566	1.00	57.77	S	O
ATOM	5756	OH2	TIP	S	171	2.334	18.380	13.740	1.00	51.34	S	O
ATOM	5757	OH2	TIP	S	172	28.084	-32.536	29.921	1.00	38.06	S	O
ATOM	5758	OH2	TIP	S	173	49.387	-16.972	17.395	1.00	39.19	S	O
ATOM	5759	OH2	TIP	S	174	41.403	-17.481	36.462	1.00	47.52	S	O
ATOM	5760	OH2	TIP	S	175	33.922	-17.618	8.080	1.00	49.03	S	O
ATOM	5761	OH2	TIP	S	176	46.423	13.612	26.109	1.00	43.63	S	O
ATOM	5762	OH2	TIP	S	177	27.843	14.058	48.952	1.00	40.44	S	O
ATOM	5763	OH2	TIP	S	178	16.377	-13.279	28.637	1.00	26.81	S	O
ATOM	5764	OH2	TIP	S	179	24.645	1.743	37.011	1.00	46.86	S	O
ATOM	5765	OH2	TIP	S	180	22.860	-9.391	46.277	1.00	40.97	S	O
ATOM	5766	OH2	TIP	S	181	52.401	-5.907	20.136	1.00	56.82	S	O
ATOM	5767	OH2	TIP	S	182	31.346	-1.510	26.184	1.00	50.84	S	O
ATOM	5768	OH2	TIP	S	183	8.579	-20.226	19.723	1.00	49.64	S	O
ATOM	5769	OH2	TIP	S	184	34.285	0.800	12.782	1.00	51.52	S	O
ATOM	5770	OH2	TIP	S	185	27.618	-0.905	31.516	1.00	55.97	S	O
ATOM	5771	OH2	TIP	S	186	12.205	4.117	39.132	1.00	46.40	S	O
ATOM	5772	OH2	TIP	S	187	45.535	-28.349	18.951	1.00	45.46	S	O
ATOM	5773	OH2	TIP	S	188	54.870	-5.432	24.450	1.00	36.97	S	O
ATOM	5774	OH2	TIP	S	189	-2.004	-30.906	36.832	1.00	42.37	S	O
ATOM	5775	OH2	TIP	S	190	1.064	-24.643	45.104	1.00	36.29	S	O
ATOM	5776	OH2	TIP	S	191	46.686	0.944	22.161	1.00	74.95	S	O
ATOM	5777	OH2	TIP	S	192	33.805	-6.535	21.103	1.00	27.29	S	O
ATOM	5778	OH2	TIP	S	193	47.235	-9.863	24.388	1.00	19.81	S	O
ATOM	5779	OH2	TIP	S	195	52.071	-3.289	28.309	1.00	33.84	S	O
ATOM	5780	OH2	TIP	S	196	10.768	-1.640	22.614	1.00	31.12	S	O

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ATOM	5781	OH2	TIP	S	197	29.702	-6.326	27.904	1.00	42.65	S	O
ATOM	5782	OH2	TIP	S	198	31.912	6.809	29.969	1.00	29.39	S	O
ATOM	5783	OH2	TIP	S	199	21.963	25.257	71.147	1.00	39.64	S	O
ATOM	5784	OH2	TIP	S	200	1.567	11.980	18.833	1.00	55.05	S	O
ATOM	5785	OH2	TIP	S	201	2.705	-4.817	37.773	1.00	50.47	S	O
ATOM	5786	OH2	TIP	S	202	24.625	2.960	62.099	1.00	49.82	S	O
ATOM	5787	OH2	TIP	S	203	33.259	2.129	20.167	1.00	34.18	S	O
ATOM	5788	OH2	TIP	S	204	34.439	12.263	2.397	1.00	52.86	S	O
ATOM	5789	OH2	TIP	S	205	15.563	0.111	59.170	1.00	53.34	S	O
ATOM	5790	OH2	TIP	S	206	3.665	8.307	18.263	1.00	45.36	S	O
ATOM	5791	OH2	TIP	S	207	42.327	-0.708	44.288	1.00	51.47	S	O
ATOM	5792	OH2	TIP	S	208	8.575	-26.799	36.849	1.00	45.66	S	O
ATOM	5793	OH2	TIP	S	209	28.270	11.530	50.955	1.00	64.13	S	O
ATOM	5794	OH2	TIP	S	210	42.089	-17.505	10.475	1.00	58.99	S	O
ATOM	5795	OH2	TIP	S	211	30.362	8.306	19.566	1.00	30.33	S	O
ATOM	5796	OH2	TIP	S	212	20.608	3.714	49.389	1.00	50.16	S	O
ATOM	5797	OH2	TIP	S	213	26.356	-1.653	-4.546	1.00	39.39	S	O
ATOM	5798	OH2	TIP	S	214	27.571	10.123	39.193	1.00	41.22	S	O
ATOM	5799	OH2	TIP	S	215	15.362	20.516	-4.150	1.00	59.65	S	O
ATOM	5800	OH2	TIP	S	216	10.218	-22.751	20.313	1.00	40.03	S	O
ATOM	5801	OH2	TIP	S	217	30.909	-34.241	23.363	1.00	41.59	S	O
ATOM	5802	OH2	TIP	S	218	-12.166	-26.554	39.093	1.00	50.82	S	O
ATOM	5803	OH2	TIP	S	219	26.864	-26.014	29.824	1.00	39.12	S	O
ATOM	5804	OH2	TIP	S	220	9.943	4.516	52.239	1.00	47.80	S	O
ATOM	5805	OH2	TIP	S	221	17.502	18.242	24.930	1.00	52.53	S	O
ATOM	5806	OH2	TIP	S	222	21.549	5.114	53.502	1.00	63.85	S	O
ATOM	5807	OH2	TIP	S	223	24.252	-13.992	30.680	1.00	36.95	S	O
ATOM	5808	OH2	TIP	S	224	15.813	-23.649	32.627	1.00	43.15	S	O
ATOM	5809	OH2	TIP	S	225	2.434	-32.083	38.608	1.00	34.66	S	O
ATOM	5810	OH2	TIP	S	226	13.473	-7.205	67.948	1.00	48.10	S	O
ATOM	5811	OH2	TIP	S	227	33.308	33.637	73.022	1.00	39.33	S	O
ATOM	5812	OH2	TIP	S	228	17.026	34.951	8.872	1.00	55.86	S	O
ATOM	5813	OH2	TIP	S	229	6.250	16.558	0.239	1.00	52.99	S	O
ATOM	5814	OH2	TIP	S	230	28.927	-4.308	-1.644	1.00	48.69	S	O
ATOM	5815	OH2	TIP	S	231	32.175	30.036	32.625	1.00	57.10	S	O
ATOM	5816	OH2	TIP	S	232	9.023	3.781	14.589	1.00	46.58	S	O
ATOM	5817	OH2	TIP	S	233	14.595	-6.770	33.725	1.00	60.91	S	O
ATOM	5818	C25	TTC		990	19.711	1.612	29.499	1.00	31.52	TTC	C
ATOM	5819	C31	TTC		990	18.647	0.772	30.250	1.00	37.26	TTC	C
ATOM	5820	C21	TTC		990	20.093	1.095	28.081	1.00	28.63	TTC	C
ATOM	5821	O24	TTC		990	18.985	0.835	27.410	1.00	28.81	TTC	O
ATOM	5822	C16	TTC		990	20.975	-0.134	28.225	1.00	22.64	TTC	C
ATOM	5823	C20	TTC		990	20.900	2.173	27.275	1.00	30.42	TTC	C
ATOM	5824	C15	TTC		990	22.390	-0.008	28.382	1.00	22.74	TTC	C
ATOM	5825	C17	TTC		990	20.572	-1.469	28.212	1.00	18.37	TTC	C
ATOM	5826	O23	TTC		990	20.337	2.985	26.406	1.00	32.06	TTC	O
ATOM	5827	O22	TTC		990	22.266	2.288	27.468	1.00	33.16	TTC	O
ATOM	5828	C14	TTC		990	23.262	-1.100	28.510	1.00	20.87	TTC	C
ATOM	5829	C19	TTC		990	22.960	1.417	28.406	1.00	25.11	TTC	C
ATOM	5830	C13	TTC		990	21.462	-2.551	28.335	1.00	13.02	TTC	C
ATOM	5831	O18	TTC		990	24.569	-0.940	28.653	1.00	19.82	TTC	O
ATOM	5832	N12	TTC		990	22.757	-2.378	28.477	1.00	17.07	TTC	N
ATOM	5833	C9	TTC		990	21.166	-3.915	28.312	1.00	16.08	TTC	C
ATOM	5834	C11	TTC		990	23.525	-3.637	28.582	1.00	14.74	TTC	C
ATOM	5835	C8	TTC		990	22.420	-4.670	28.459	1.00	15.63	TTC	C
ATOM	5836	N10	TTC		990	19.934	-4.428	28.169	1.00	17.12	TTC	N
ATOM	5837	C7	TTC		990	22.350	-6.000	28.448	1.00	19.90	TTC	C
ATOM	5838	C5	TTC		990	19.901	-5.828	28.157	1.00	19.29	TTC	C
ATOM	5839	C6	TTC		990	21.073	-6.635	28.283	1.00	22.05	TTC	C
ATOM	5840	C4	TTC		990	18.659	-6.360	27.995	1.00	21.93	TTC	C
ATOM	5841	C1	TTC		990	20.927	-8.035	28.241	1.00	27.11	TTC	C
ATOM	5842	C3	TTC		990	18.521	-7.759	27.951	1.00	23.65	TTC	C
ATOM	5843	C2	TTC		990	19.654	-8.580	28.071	1.00	25.75	TTC	C
ATOM	5844	C27	TTC		990	22.083	-9.036	28.351	1.00	30.21	TTC	C
ATOM	5845	N28	TTC		990	22.694	-9.397	27.044	1.00	33.02	TTC	N
ATOM	5846	C29	TTC		990	23.859	-8.583	26.724	1.00	32.94	TTC	C
ATOM	5847	C30	TTC		990	23.061	-10.823	26.967	1.00	34.81	TTC	C
ATOM	5848	O26	TTC		990	19.435	-9.928	28.014	1.00	29.60	TTC	O
ATOM	5849	HG+2	HG2		900	24.503	14.328	25.316	0.36	73.40	M	

END

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## FIGURE 3

Form9-AG260. Coordinates for the crystal structure  
 REMARK of human topoisomerase I in covalent complex with duplex 22mer  
 REMARK DNA and the anti-cancer compound AG260.  
 REMARK coordinates from restrained individual B-factor refinement  
 REMARK refinement resolution: 20.0 - 3.0 A  
 REMARK starting r= 0.2327 free\_r= 0.2979  
 REMARK final r= 0.2312 free\_r= 0.2982  
 REMARK B rmsd for bonded mainchain atoms= 1.306 target= 1.5  
 REMARK B rmsd for bonded sidechain atoms= 1.758 target= 2.0  
 REMARK B rmsd for angle mainchain atoms= 2.302 target= 2.0  
 REMARK B rmsd for angle sidechain atoms= 2.809 target= 2.5  
 REMARK wa= 5.84828  
 REMARK rweight=0.103097  
 REMARK target= mlf steps= 30  
 REMARK sg= P2(1) a= 57.357 b= 115.977 c= 74.998 alpha= 90 beta= 97.720 gamma= 90  
 REMARK parameter file 1 : MSI\_CNX\_TOPPAR:protein.param  
 REMARK parameter file 2 : MSI\_CNX\_TOPPAR:dna-rna.param  
 REMARK parameter file 3 : ag260/AG2\_par.par  
 REMARK parameter file 4 : MSI\_CNX\_TOPPAR:water.param  
 REMARK parameter file 5 : MSI\_CNX\_TOPPAR:ion.param  
 REMARK molecular structure file: generate.mtf  
 REMARK input coordinates: minimize.pdb  
 REMARK reflection file= b110.cv  
 REMARK ncs= none  
 REMARK B-correction resolution: 6.0 - 3.0  
 REMARK initial B-factor correction applied to fobs :  
 REMARK B11= 4.050 B22= 11.688 B33= -15.738  
 REMARK B12= 0.000 B13= -8.297 B23= 0.000  
 REMARK B-factor correction applied to coordinate array B: 0.211  
 REMARK bulk solvent: (Mask) density level= 0.385006 e/A<sup>3</sup>, B-factor= 21.8659 A<sup>2</sup>  
 REMARK reflections with |Fobs|/sigma\_F < 0.0 rejected  
 REMARK reflections with |Fobs| > 10000 \* rms(Fobs) rejected  
 REMARK theoretical total number of refl. in resol. range: 19463 ( 100.0 % )  
 REMARK number of unobserved reflections (no entry or |F|=0): 2480 ( 12.7 % )  
 REMARK number of reflections rejected: 0 ( 0.0 % )  
 REMARK total number of reflections used: 16983 ( 87.3 % )  
 REMARK number of reflections in working set: 15308 ( 78.7 % )  
 REMARK number of reflections in test set: 1675 ( 8.6 % )  
 REMARK FILENAME="hindividual.pdb"  
 REMARK DATE:Dec-08-2000 16:25:54 created by user: bart  
 REMARK Written by CNX VERSION:2000

ATOM	1	CB	ALA	201	48.569	-11.722	37.068	1.00	36.18	A	C
ATOM	2	C	ALA	201	48.537	-9.194	37.072	1.00	35.40	A	C
ATOM	3	O	ALA	201	49.277	-8.308	36.638	1.00	37.09	A	O
ATOM	4	N	ALA	201	49.009	-10.515	39.193	1.00	36.62	A	N
ATOM	5	CA	ALA	201	49.152	-10.460	37.704	1.00	36.58	A	C
ATOM	6	N	ALA	202	47.203	-9.114	37.028	1.00	32.55	A	N
ATOM	7	CA	ALA	202	46.469	-7.970	36.453	1.00	30.63	A	C
ATOM	8	CB	ALA	202	46.353	-6.841	37.468	1.00	29.91	A	C
ATOM	9	C	ALA	202	47.069	-7.445	35.146	1.00	28.95	A	C
ATOM	10	O	ALA	202	48.050	-6.695	35.163	1.00	30.39	A	O
ATOM	11	N	TRP	203	46.441	-7.799	34.026	1.00	25.47	A	N
ATOM	12	CA	TRP	203	46.917	-7.396	32.706	1.00	22.29	A	C
ATOM	13	CB	TRP	203	46.500	-8.436	31.658	1.00	18.16	A	C
ATOM	14	CG	TRP	203	46.929	-8.111	30.252	1.00	13.65	A	C
ATOM	15	CD2	TRP	203	46.195	-8.358	29.043	1.00	12.18	A	C
ATOM	16	CE2	TRP	203	46.995	-7.906	27.969	1.00	10.42	A	C

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ATOM	17	CE3	TRP	203	44.940	-8.917	28.763	1.00	11.46	A	C
ATOM	18	CD1	TRP	203	48.104	-7.533	29.868	1.00	12.32	A	C
ATOM	19	NE1	TRP	203	48.152	-7.407	28.503	1.00	11.17	A	N
ATOM	20	CZ2	TRP	203	46.587	-7.995	26.642	1.00	7.50	A	C
ATOM	21	CZ3	TRP	203	44.534	-9.004	27.434	1.00	10.10	A	C
ATOM	22	CH2	TRP	203	45.362	-8.543	26.395	1.00	9.79	A	C
ATOM	23	C	TRP	203	46.494	-6.001	32.236	1.00	22.87	A	C
ATOM	24	O	TRP	203	45.311	-5.720	32.031	1.00	23.95	A	O
ATOM	25	N	LYS	204	47.482	-5.147	32.011	1.00	21.99	A	N
ATOM	26	CA	LYS	204	47.230	-3.804	31.525	1.00	21.93	A	C
ATOM	27	CB	LYS	204	48.283	-2.841	32.078	1.00	25.03	A	C
ATOM	28	CG	LYS	204	48.403	-2.816	33.591	1.00	28.88	A	C
ATOM	29	CD	LYS	204	49.475	-1.816	34.031	1.00	31.81	A	C
ATOM	30	CE	LYS	204	49.627	-1.798	35.543	1.00	34.63	A	C
ATOM	31	NZ	LYS	204	50.611	-0.778	36.008	1.00	36.38	A	N
ATOM	32	C	LYS	204	47.289	-3.801	29.990	1.00	19.86	A	C
ATOM	33	O	LYS	204	48.312	-3.440	29.401	1.00	19.64	A	O
ATOM	34	N	TRP	205	46.197	-4.202	29.345	1.00	17.79	A	N
ATOM	35	CA	TRP	205	46.135	-4.240	27.876	1.00	16.56	A	C
ATOM	36	CB	TRP	205	44.860	-4.949	27.416	1.00	11.88	A	C
ATOM	37	CG	TRP	205	43.599	-4.334	27.917	1.00	7.56	A	C
ATOM	38	CD2	TRP	205	42.920	-3.196	27.373	1.00	5.17	A	C
ATOM	39	CE2	TRP	205	41.774	-2.979	28.164	1.00	4.24	A	C
ATOM	40	CE3	TRP	205	43.172	-2.336	26.301	1.00	4.24	A	C
ATOM	41	CD1	TRP	205	42.859	-4.749	28.980	1.00	6.69	A	C
ATOM	42	NE1	TRP	205	41.758	-3.942	29.135	1.00	5.16	A	N
ATOM	43	CZ2	TRP	205	40.882	-1.934	27.920	1.00	3.20	A	C
ATOM	44	CZ3	TRP	205	42.280	-1.294	26.059	1.00	3.99	A	C
ATOM	45	CH2	TRP	205	41.151	-1.103	26.868	1.00	1.00	A	C
ATOM	46	C	TRP	205	46.259	-2.882	27.160	1.00	17.66	A	C
ATOM	47	O	TRP	205	46.700	-2.814	26.013	1.00	18.56	A	O
ATOM	48	N	TRP	206	45.848	-1.815	27.840	1.00	18.47	A	N
ATOM	49	CA	TRP	206	45.890	-0.443	27.323	1.00	18.29	A	C
ATOM	50	CB	TRP	206	45.087	0.459	28.257	1.00	14.82	A	C
ATOM	51	CG	TRP	206	45.461	0.285	29.697	1.00	11.90	A	C
ATOM	52	CD2	TRP	206	44.871	-0.615	30.641	1.00	9.01	A	C
ATOM	53	CE2	TRP	206	45.538	-0.431	31.863	1.00	9.46	A	C
ATOM	54	CE3	TRP	206	43.840	-1.551	30.573	1.00	8.29	A	C
ATOM	55	CD1	TRP	206	46.436	0.954	30.367	1.00	12.45	A	C
ATOM	56	NE1	TRP	206	46.489	0.533	31.668	1.00	11.53	A	N
ATOM	57	CZ2	TRP	206	45.208	-1.148	33.014	1.00	10.56	A	C
ATOM	58	CZ3	TRP	206	43.506	-2.263	31.719	1.00	8.88	A	C
ATOM	59	CH2	TRP	206	44.188	-2.057	32.923	1.00	9.69	A	C
ATOM	60	C	TRP	206	47.310	0.117	27.130	1.00	21.18	A	C
ATOM	61	O	TRP	206	47.494	1.307	26.868	1.00	20.69	A	O
ATOM	62	N	GLU	207	48.310	-0.744	27.287	1.00	24.47	A	N
ATOM	63	CA	GLU	207	49.698	-0.351	27.101	1.00	27.84	A	C
ATOM	64	CB	GLU	207	50.500	-0.548	28.380	1.00	29.41	A	C
ATOM	65	CG	GLU	207	50.238	0.542	29.383	1.00	32.60	A	C
ATOM	66	CD	GLU	207	50.893	0.298	30.722	1.00	36.36	A	C
ATOM	67	OE1	GLU	207	51.389	-0.831	30.963	1.00	38.79	A	O
ATOM	68	OE2	GLU	207	50.903	1.243	31.545	1.00	37.98	A	O
ATOM	69	C	GLU	207	50.330	-1.098	25.940	1.00	28.67	A	C
ATOM	70	O	GLU	207	51.451	-0.792	25.530	1.00	29.37	A	O
ATOM	71	N	GLU	208	49.586	-2.060	25.403	1.00	30.73	A	N
ATOM	72	CA	GLU	208	50.019	-2.866	24.264	1.00	33.11	A	C
ATOM	73	CB	GLU	208	49.285	-4.219	24.272	1.00	33.21	A	C
ATOM	74	CG	GLU	208	49.190	-4.936	25.645	1.00	31.30	A	C
ATOM	75	CD	GLU	208	50.408	-5.795	25.992	1.00	30.14	A	C
ATOM	76	OE1	GLU	208	51.361	-5.865	25.188	1.00	28.96	A	O
ATOM	77	OE2	GLU	208	50.406	-6.416	27.076	1.00	29.16	A	O
ATOM	78	C	GLU	208	49.629	-2.093	22.999	1.00	34.69	A	C
ATOM	79	O	GLU	208	48.721	-1.263	23.037	1.00	34.54	A	O

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ATOM	80	N	GLU	209	50.316	-2.351	21.889	1.00	37.32	A	N
ATOM	81	CA	GLU	209	49.998	-1.681	20.629	1.00	41.21	A	C
ATOM	82	CB	GLU	209	50.915	-2.174	19.508	1.00	42.49	A	C
ATOM	83	CG	GLU	209	52.342	-1.644	19.559	1.00	46.48	A	C
ATOM	84	CD	GLU	209	53.232	-2.264	18.491	1.00	48.49	A	C
ATOM	85	OE1	GLU	209	54.345	-2.727	18.837	1.00	49.52	A	O
ATOM	86	OE2	GLU	209	52.815	-2.295	17.311	1.00	49.42	A	O
ATOM	87	C	GLU	209	48.560	-1.990	20.248	1.00	42.61	A	C
ATOM	88	O	GLU	209	48.114	-3.126	20.394	1.00	42.54	A	O
ATOM	89	N	ARG	210	47.839	-0.990	19.750	1.00	45.37	A	N
ATOM	90	CA	ARG	210	46.442	-1.192	19.349	1.00	48.41	A	C
ATOM	91	CB	ARG	210	45.877	0.021	18.591	1.00	52.84	A	C
ATOM	92	CG	ARG	210	45.288	1.138	19.457	1.00	57.93	A	C
ATOM	93	CD	ARG	210	44.393	2.079	18.621	1.00	61.96	A	C
ATOM	94	NE	ARG	210	45.079	2.640	17.453	1.00	64.62	A	N
ATOM	95	CZ	ARG	210	45.456	3.913	17.331	1.00	66.27	A	C
ATOM	96	NH1	ARG	210	46.076	4.317	16.227	1.00	67.16	A	N
ATOM	97	NH2	ARG	210	45.215	4.785	18.307	1.00	66.51	A	N
ATOM	98	C	ARG	210	46.278	-2.427	18.478	1.00	47.20	A	C
ATOM	99	O	ARG	210	47.119	-2.730	17.634	1.00	46.79	A	O
ATOM	100	N	TYR	211	45.175	-3.128	18.684	1.00	46.98	A	N
ATOM	101	CA	TYR	211	44.898	-4.329	17.923	1.00	46.67	A	C
ATOM	102	CB	TYR	211	43.728	-5.098	18.553	1.00	46.68	A	C
ATOM	103	CG	TYR	211	43.991	-6.580	18.627	1.00	45.48	A	C
ATOM	104	CD1	TYR	211	43.636	-7.418	17.571	1.00	45.39	A	C
ATOM	105	CE1	TYR	211	43.982	-8.755	17.571	1.00	45.90	A	C
ATOM	106	CD2	TYR	211	44.690	-7.127	19.700	1.00	44.35	A	C
ATOM	107	CE2	TYR	211	45.043	-8.466	19.714	1.00	45.28	A	C
ATOM	108	CZ	TYR	211	44.691	-9.276	18.641	1.00	46.50	A	C
ATOM	109	OH	TYR	211	45.087	-10.591	18.598	1.00	46.51	A	O
ATOM	110	C	TYR	211	44.604	-3.963	16.471	1.00	46.49	A	C
ATOM	111	O	TYR	211	43.892	-2.998	16.203	1.00	46.28	A	O
ATOM	112	N	PRO	212	45.163	-4.726	15.517	1.00	47.14	A	N
ATOM	113	CD	PRO	212	46.026	-5.893	15.764	1.00	47.34	A	C
ATOM	114	CA	PRO	212	44.989	-4.514	14.075	1.00	47.45	A	C
ATOM	115	CB	PRO	212	45.804	-5.652	13.463	1.00	47.40	A	C
ATOM	116	CG	PRO	212	46.819	-5.958	14.506	1.00	48.03	A	C
ATOM	117	C	PRO	212	43.540	-4.603	13.601	1.00	47.79	A	C
ATOM	118	O	PRO	212	42.872	-5.622	13.811	1.00	47.79	A	O
ATOM	119	N	GLU	213	43.071	-3.541	12.946	1.00	48.00	A	N
ATOM	120	CA	GLU	213	41.713	-3.498	12.404	1.00	48.25	A	C
ATOM	121	CB	GLU	213	41.479	-2.165	11.666	1.00	50.54	A	C
ATOM	122	CG	GLU	213	40.229	-2.088	10.747	1.00	52.06	A	C
ATOM	123	CD	GLU	213	40.474	-2.630	9.324	1.00	53.39	A	C
ATOM	124	OE1	GLU	213	39.827	-3.632	8.939	1.00	53.76	A	O
ATOM	125	OE2	GLU	213	41.309	-2.053	8.589	1.00	53.45	A	O
ATOM	126	C	GLU	213	41.541	-4.686	11.453	1.00	47.29	A	C
ATOM	127	O	GLU	213	42.325	-4.859	10.507	1.00	47.46	A	O
ATOM	128	N	GLY	214	40.533	-5.513	11.727	1.00	45.14	A	N
ATOM	129	CA	GLY	214	40.279	-6.680	10.895	1.00	41.57	A	C
ATOM	130	C	GLY	214	40.060	-7.913	11.745	1.00	38.67	A	C
ATOM	131	O	GLY	214	38.945	-8.180	12.194	1.00	38.24	A	O
ATOM	132	N	ILE	215	41.133	-8.661	11.972	1.00	35.38	A	N
ATOM	133	CA	ILE	215	41.076	-9.867	12.787	1.00	33.23	A	C
ATOM	134	CB	ILE	215	42.358	-10.717	12.595	1.00	33.10	A	C
ATOM	135	CG2	ILE	215	42.409	-11.842	13.609	1.00	33.17	A	C
ATOM	136	CG1	ILE	215	42.402	-11.271	11.164	1.00	32.43	A	C
ATOM	137	CD1	ILE	215	43.511	-12.273	10.906	1.00	32.76	A	C
ATOM	138	C	ILE	215	40.914	-9.463	14.251	1.00	31.23	A	C
ATOM	139	O	ILE	215	41.700	-8.673	14.758	1.00	32.87	A	O
ATOM	140	N	LYS	216	39.884	-9.979	14.914	1.00	28.56	A	N
ATOM	141	CA	LYS	216	39.632	-9.640	16.310	1.00	27.51	A	C
ATOM	142	CB	LYS	216	38.157	-9.838	16.669	1.00	27.46	A	C



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ATOM	143	CG	LYS	216	37.169	-9.164	15.745	1.00	30.03	A	C
ATOM	144	CD	LYS	216	37.293	-7.665	15.782	1.00	32.45	A	C
ATOM	145	CE	LYS	216	36.585	-7.033	14.596	1.00	34.39	A	C
ATOM	146	NZ	LYS	216	37.135	-5.674	14.281	1.00	38.35	A	N
ATOM	147	C	LYS	216	40.470	-10.437	17.300	1.00	27.21	A	C
ATOM	148	O	LYS	216	40.598	-10.040	18.457	1.00	29.30	A	O
ATOM	149	N	TRP	217	41.009	-11.573	16.875	1.00	25.52	A	N
ATOM	150	CA	TRP	217	41.808	-12.418	17.764	1.00	24.24	A	C
ATOM	151	CB	TRP	217	40.911	-13.112	18.801	1.00	22.22	A	C
ATOM	152	CG	TRP	217	39.688	-13.737	18.206	1.00	22.58	A	C
ATOM	153	CD2	TRP	217	39.587	-15.037	17.610	1.00	22.81	A	C
ATOM	154	CE2	TRP	217	38.283	-15.161	17.096	1.00	22.11	A	C
ATOM	155	CE3	TRP	217	40.475	-16.108	17.458	1.00	22.70	A	C
ATOM	156	CD1	TRP	217	38.466	-13.152	18.048	1.00	21.63	A	C
ATOM	157	NE1	TRP	217	37.618	-13.998	17.377	1.00	21.70	A	N
ATOM	158	CZ2	TRP	217	37.847	-16.307	16.442	1.00	23.12	A	C
ATOM	159	CZ3	TRP	217	40.041	-17.246	16.810	1.00	22.10	A	C
ATOM	160	CH2	TRP	217	38.741	-17.337	16.308	1.00	22.47	A	C
ATOM	161	C	TRP	217	42.587	-13.456	16.973	1.00	23.81	A	C
ATOM	162	O	TRP	217	42.320	-13.674	15.792	1.00	25.42	A	O
ATOM	163	N	LYS	218	43.553	-14.095	17.622	1.00	22.23	A	N
ATOM	164	CA	LYS	218	44.373	-15.111	16.960	1.00	20.80	A	C
ATOM	165	CB	LYS	218	45.867	-14.776	17.102	1.00	22.93	A	C
ATOM	166	CG	LYS	218	46.227	-13.300	16.911	1.00	27.01	A	C
ATOM	167	CD	LYS	218	47.712	-13.021	17.197	1.00	29.36	A	C
ATOM	168	CE	LYS	218	48.108	-13.380	18.635	1.00	30.55	A	C
ATOM	169	NZ	LYS	218	49.562	-13.161	18.905	1.00	30.34	A	N
ATOM	170	C	LYS	218	44.103	-16.488	17.566	1.00	17.79	A	C
ATOM	171	O	LYS	218	44.134	-17.491	16.870	1.00	17.16	A	O
ATOM	172	N	PHE	219	43.862	-16.521	18.875	1.00	14.64	A	N
ATOM	173	CA	PHE	219	43.601	-17.755	19.591	1.00	11.48	A	C
ATOM	174	CB	PHE	219	44.786	-18.133	20.460	1.00	9.19	A	C
ATOM	175	CG	PHE	219	44.584	-19.401	21.210	1.00	7.15	A	C
ATOM	176	CD1	PHE	219	44.829	-20.619	20.596	1.00	6.15	A	C
ATOM	177	CD2	PHE	219	44.101	-19.382	22.508	1.00	5.89	A	C
ATOM	178	CE1	PHE	219	44.593	-21.798	21.254	1.00	6.99	A	C
ATOM	179	CE2	PHE	219	43.858	-20.557	23.184	1.00	7.91	A	C
ATOM	180	CZ	PHE	219	44.102	-21.776	22.557	1.00	8.50	A	C
ATOM	181	C	PHE	219	42.382	-17.606	20.472	1.00	11.28	A	C
ATOM	182	O	PHE	219	42.232	-16.597	21.166	1.00	9.94	A	O
ATOM	183	N	LEU	220	41.572	-18.664	20.517	1.00	11.13	A	N
ATOM	184	CA	LEU	220	40.334	-18.655	21.291	1.00	10.09	A	C
ATOM	185	CB	LEU	220	39.225	-18.039	20.438	1.00	7.31	A	C
ATOM	186	CG	LEU	220	37.913	-17.702	21.125	1.00	7.59	A	C
ATOM	187	CD1	LEU	220	38.127	-16.930	22.424	1.00	4.84	A	C
ATOM	188	CD2	LEU	220	37.090	-16.903	20.152	1.00	8.76	A	C
ATOM	189	C	LEU	220	39.922	-20.046	21.745	1.00	8.88	A	C
ATOM	190	O	LEU	220	39.773	-20.940	20.936	1.00	9.64	A	O
ATOM	191	N	GLU	221	39.742	-20.219	23.045	1.00	10.32	A	N
ATOM	192	CA	GLU	221	39.347	-21.503	23.601	1.00	14.04	A	C
ATOM	193	CB	GLU	221	40.567	-22.296	24.085	1.00	16.43	A	C
ATOM	194	CG	GLU	221	40.190	-23.705	24.555	1.00	23.29	A	C
ATOM	195	CD	GLU	221	41.358	-24.538	25.063	1.00	26.81	A	C
ATOM	196	OE1	GLU	221	41.948	-25.297	24.259	1.00	28.22	A	O
ATOM	197	OE2	GLU	221	41.656	-24.468	26.276	1.00	29.21	A	O
ATOM	198	C	GLU	221	38.414	-21.282	24.778	1.00	15.22	A	C
ATOM	199	O	GLU	221	38.721	-20.469	25.660	1.00	16.32	A	O
ATOM	200	N	HIS	222	37.300	-22.019	24.803	1.00	14.87	A	N
ATOM	201	CA	HIS	222	36.310	-21.918	25.877	1.00	15.61	A	C
ATOM	202	CB	HIS	222	35.358	-20.736	25.621	1.00	14.77	A	C
ATOM	203	CG	HIS	222	34.630	-20.812	24.318	1.00	13.90	A	C
ATOM	204	CD2	HIS	222	34.903	-20.266	23.109	1.00	14.71	A	C
ATOM	205	ND1	HIS	222	33.481	-21.554	24.152	1.00	14.44	A	N

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ATOM	206	CE1	HIS	222	33.079	-21.467	22.895	1.00	13.92	A	C
ATOM	207	NE2	HIS	222	33.925	-20.692	22.241	1.00	14.06	A	N
ATOM	208	C	HIS	222	35.518	-23.216	26.068	1.00	17.10	A	C
ATOM	209	O	HIS	222	35.555	-24.099	25.218	1.00	18.66	A	O
ATOM	210	N	LYS	223	34.817	-23.331	27.196	1.00	18.32	A	N
ATOM	211	CA	LYS	223	34.010	-24.520	27.514	1.00	18.66	A	C
ATOM	212	CB	LYS	223	34.070	-24.823	29.023	1.00	19.35	A	C
ATOM	213	CG	LYS	223	35.317	-25.553	29.501	1.00	21.73	A	C
ATOM	214	CD	LYS	223	35.323	-26.998	29.032	1.00	25.62	A	C
ATOM	215	CE	LYS	223	36.624	-27.691	29.427	1.00	29.28	A	C
ATOM	216	NZ	LYS	223	36.742	-29.097	28.915	1.00	31.75	A	N
ATOM	217	C	LYS	223	32.528	-24.459	27.075	1.00	18.27	A	C
ATOM	218	O	LYS	223	31.682	-25.145	27.657	1.00	18.49	A	O
ATOM	219	N	GLY	224	32.207	-23.646	26.070	1.00	16.40	A	N
ATOM	220	CA	GLY	224	30.827	-23.554	25.614	1.00	15.35	A	C
ATOM	221	C	GLY	224	29.865	-22.930	26.611	1.00	14.78	A	C
ATOM	222	O	GLY	224	30.285	-22.403	27.638	1.00	15.39	A	O
ATOM	223	N	PRO	225	28.555	-22.960	26.338	1.00	12.89	A	N
ATOM	224	CD	PRO	225	27.886	-23.295	25.068	1.00	10.93	A	C
ATOM	225	CA	PRO	225	27.604	-22.364	27.281	1.00	11.24	A	C
ATOM	226	CB	PRO	225	26.473	-21.947	26.358	1.00	10.58	A	C
ATOM	227	CG	PRO	225	26.423	-23.088	25.407	1.00	9.90	A	C
ATOM	228	C	PRO	225	27.084	-23.306	28.381	1.00	10.62	A	C
ATOM	229	O	PRO	225	27.225	-24.522	28.302	1.00	11.55	A	O
ATOM	230	N	VAL	226	26.522	-22.716	29.425	1.00	8.88	A	N
ATOM	231	CA	VAL	226	25.918	-23.453	30.530	1.00	8.21	A	C
ATOM	232	CB	VAL	226	26.255	-22.807	31.909	1.00	7.22	A	C
ATOM	233	CG1	VAL	226	25.207	-23.158	32.946	1.00	4.63	A	C
ATOM	234	CG2	VAL	226	27.601	-23.285	32.382	1.00	7.50	A	C
ATOM	235	C	VAL	226	24.402	-23.405	30.253	1.00	9.00	A	C
ATOM	236	O	VAL	226	23.776	-22.330	30.218	1.00	6.38	A	O
ATOM	237	N	PHE	227	23.830	-24.580	30.014	1.00	9.56	A	N
ATOM	238	CA	PHE	227	22.416	-24.692	29.709	1.00	8.60	A	C
ATOM	239	CB	PHE	227	22.155	-26.026	29.015	1.00	4.87	A	C
ATOM	240	CG	PHE	227	22.841	-26.144	27.682	1.00	2.82	A	C
ATOM	241	CD1	PHE	227	22.152	-25.883	26.507	1.00	4.43	A	C
ATOM	242	CD2	PHE	227	24.195	-26.440	27.601	1.00	3.80	A	C
ATOM	243	CE1	PHE	227	22.799	-25.903	25.257	1.00	4.01	A	C
ATOM	244	CE2	PHE	227	24.857	-26.467	26.360	1.00	3.56	A	C
ATOM	245	CZ	PHE	227	24.153	-26.193	25.186	1.00	5.45	A	C
ATOM	246	C	PHE	227	21.509	-24.466	30.922	1.00	10.51	A	C
ATOM	247	O	PHE	227	21.919	-24.674	32.064	1.00	8.90	A	O
ATOM	248	N	ALA	228	20.297	-23.970	30.660	1.00	11.61	A	N
ATOM	249	CA	ALA	228	19.325	-23.692	31.709	1.00	11.52	A	C
ATOM	250	CB	ALA	228	18.135	-23.028	31.115	1.00	9.18	A	C
ATOM	251	C	ALA	228	18.899	-24.964	32.431	1.00	13.46	A	C
ATOM	252	O	ALA	228	18.610	-25.976	31.782	1.00	15.10	A	O
ATOM	253	N	PRO	229	18.814	-24.920	33.780	1.00	13.54	A	N
ATOM	254	CD	PRO	229	18.953	-23.727	34.632	1.00	13.05	A	C
ATOM	255	CA	PRO	229	18.415	-26.077	34.590	1.00	14.97	A	C
ATOM	256	CB	PRO	229	18.200	-25.469	35.984	1.00	13.67	A	C
ATOM	257	CG	PRO	229	17.964	-24.015	35.718	1.00	12.56	A	C
ATOM	258	C	PRO	229	17.139	-26.717	34.064	1.00	17.58	A	C
ATOM	259	O	PRO	229	16.154	-26.028	33.801	1.00	19.45	A	O
ATOM	260	N	PRO	230	17.133	-28.047	33.904	1.00	18.78	A	N
ATOM	261	CD	PRO	230	18.147	-29.037	34.307	1.00	20.54	A	C
ATOM	262	CA	PRO	230	15.934	-28.719	33.399	1.00	21.36	A	C
ATOM	263	CB	PRO	230	16.351	-30.196	33.413	1.00	20.95	A	C
ATOM	264	CG	PRO	230	17.304	-30.263	34.563	1.00	19.09	A	C
ATOM	265	C	PRO	230	14.697	-28.466	34.269	1.00	22.15	A	C
ATOM	266	O	PRO	230	14.793	-27.957	35.391	1.00	22.30	A	O
ATOM	267	N	TYR	231	13.547	-28.865	33.745	1.00	22.44	A	N
ATOM	268	CA	TYR	231	12.270	-28.706	34.413	1.00	23.11	A	C

ATOM	269	CB	TYR	231	11.163	-29.015	33.408	1.00	21.30	A	
ATOM	270	CG	TYR	231	9.764	-28.910	33.944	1.00	20.68	A	
ATOM	271	CD1	TYR	231	9.284	-27.715	34.473	1.00	20.35	A	
ATOM	272	CE1	TYR	231	7.982	-27.621	34.963	1.00	21.78	A	
ATOM	273	CD2	TYR	231	8.909	-30.011	33.913	1.00	21.40	A	
ATOM	274	CE2	TYR	231	7.604	-29.927	34.396	1.00	21.51	A	
ATOM	275	CZ	TYR	231	7.151	-28.734	34.918	1.00	21.64	A	
ATOM	276	OH	TYR	231	5.872	-28.650	35.399	1.00	21.90	A	
ATOM	277	C	TYR	231	12.139	-29.625	35.619	1.00	25.53	A	
ATOM	278	O	TYR	231	12.574	-30.777	35.577	1.00	26.83	A	
ATOM	279	N	GLU	232	11.586	-29.092	36.707	1.00	27.09	A	
ATOM	280	CA	GLU	232	11.351	-29.880	37.913	1.00	29.08	A	
ATOM	281	CB	GLU	232	11.827	-29.153	39.179	1.00	29.94	A	
ATOM	282	CG	GLU	232	13.353	-29.015	39.312	1.00	33.86	A	
ATOM	283	CD	GLU	232	14.129	-30.353	39.440	1.00	36.37	A	
ATOM	284	OE1	GLU	232	13.540	-31.460	39.297	1.00	35.75	A	
ATOM	285	OE2	GLU	232	15.359	-30.281	39.684	1.00	35.30	A	
ATOM	286	C	GLU	232	9.850	-30.133	37.977	1.00	29.92	A	
ATOM	287	O	GLU	232	9.072	-29.226	38.285	1.00	30.01	A	
ATOM	288	N	PRO	233	9.425	-31.368	37.658	1.00	30.03	A	
ATOM	289	CD	PRO	233	10.317	-32.481	37.297	1.00	31.17	A	
ATOM	290	CA	PRO	233	8.033	-31.822	37.648	1.00	30.05	A	
ATOM	291	CB	PRO	233	8.182	-33.330	37.485	1.00	31.22	A	
ATOM	292	CG	PRO	233	9.376	-33.445	36.618	1.00	31.63	A	
ATOM	293	C	PRO	233	7.251	-31.480	38.907	1.00	29.54	A	
ATOM	294	O	PRO	233	7.824	-31.369	39.988	1.00	28.79	A	
ATOM	295	N	LEU	234	5.943	-31.287	38.746	1.00	28.72	A	
ATOM	296	CA	LEU	234	5.053	-30.971	39.860	1.00	27.27	A	
ATOM	297	CB	LEU	234	3.736	-30.385	39.354	1.00	26.56	A	
ATOM	298	CG	LEU	234	3.659	-28.968	38.800	1.00	25.68	A	
ATOM	299	CD1	LEU	234	2.265	-28.735	38.224	1.00	25.13	A	
ATOM	300	CD2	LEU	234	3.966	-27.968	39.891	1.00	24.58	A	
ATOM	301	C	LEU	234	4.716	-32.225	40.647	1.00	27.15	A	
ATOM	302	O	LEU	234	4.392	-33.264	40.067	1.00	27.23	A	
ATOM	303	N	PRO	235	4.777	-32.142	41.984	1.00	26.96	A	
ATOM	304	CD	PRO	235	5.231	-30.983	42.772	1.00	26.34	A	
ATOM	305	CA	PRO	235	4.463	-33.284	42.850	1.00	27.36	A	
ATOM	306	CB	PRO	235	4.730	-32.724	44.249	1.00	27.42	A	
ATOM	307	CG	PRO	235	4.581	-31.223	44.081	1.00	26.05	A	
ATOM	308	C	PRO	235	2.998	-33.716	42.648	1.00	28.25	A	
ATOM	309	O	PRO	235	2.186	-32.923	42.179	1.00	28.20	A	
ATOM	310	N	GLU	236	2.663	-34.961	42.982	1.00	29.76	A	
ATOM	311	CA	GLU	236	1.300	-35.460	42.786	1.00	31.62	A	
ATOM	312	CB	GLU	236	1.127	-36.902	43.305	1.00	35.73	A	
ATOM	313	CG	GLU	236	1.761	-37.254	44.687	1.00	43.11	A	
ATOM	314	CD	GLU	236	1.329	-36.348	45.870	1.00	46.26	A	
ATOM	315	OE1	GLU	236	2.036	-35.335	46.120	1.00	46.55	A	
ATOM	316	OE2	GLU	236	0.321	-36.664	46.563	1.00	44.90	A	
ATOM	317	C	GLU	236	0.167	-34.580	43.301	1.00	31.21	A	
ATOM	318	O	GLU	236	-0.883	-34.504	42.671	1.00	31.53	A	
ATOM	319	N	ASN	237	0.390	-33.887	44.414	1.00	30.38	A	
ATOM	320	CA	ASN	237	-0.639	-33.028	45.006	1.00	31.29	A	
ATOM	321	CB	ASN	237	-0.257	-32.647	46.439	1.00	33.38	A	
ATOM	322	CG	ASN	237	1.222	-32.357	46.591	1.00	35.43	A	
ATOM	323	OD1	ASN	237	1.948	-32.291	45.605	1.00	37.12	A	
ATOM	324	ND2	ASN	237	1.680	-32.202	47.834	1.00	36.18	A	
ATOM	325	C	ASN	237	-1.040	-31.788	44.197	1.00	30.29	A	
ATOM	326	O	ASN	237	-2.225	-31.538	44.006	1.00	30.83	A	
ATOM	327	N	VAL	238	-0.057	-31.028	43.721	1.00	28.83	A	
ATOM	328	CA	VAL	238	-0.298	-29.821	42.925	1.00	27.53	A	
ATOM	329	CB	VAL	238	1.029	-29.103	42.645	1.00	26.89	A	
ATOM	330	CG1	VAL	238	0.799	-27.825	41.861	1.00	27.12	A	
ATOM	331	CG2	VAL	238	1.742	-28.828	43.948	1.00	26.20	A	

ATOM	332	C	VAL	238	-0.945	-30.194	41.595	1.00	27.75	A	C
ATOM	333	O	VAL	238	-0.250	-30.532	40.643	1.00	27.83	A	O
ATOM	334	N	LYS	239	-2.266	-30.070	41.512	1.00	28.43	A	N
ATOM	335	CA	LYS	239	-2.987	-30.453	40.303	1.00	29.29	A	C
ATOM	336	CB	LYS	239	-4.110	-31.423	40.674	1.00	30.77	A	C
ATOM	337	CG	LYS	239	-3.601	-32.684	41.341	1.00	33.10	A	C
ATOM	338	CD	LYS	239	-4.684	-33.724	41.528	1.00	34.76	A	C
ATOM	339	CE	LYS	239	-4.069	-35.109	41.732	1.00	35.87	A	C
ATOM	340	NZ	LYS	239	-3.263	-35.207	42.979	1.00	35.94	A	N
ATOM	341	C	LYS	239	-3.539	-29.335	39.426	1.00	29.20	A	C
ATOM	342	O	LYS	239	-3.775	-28.228	39.897	1.00	30.11	A	O
ATOM	343	N	PHE	240	-3.747	-29.653	38.146	1.00	28.34	A	N
ATOM	344	CA	PHE	240	-4.291	-28.721	37.151	1.00	27.02	A	C
ATOM	345	CB	PHE	240	-3.433	-28.748	35.873	1.00	24.47	A	C
ATOM	346	CG	PHE	240	-4.034	-28.005	34.701	1.00	20.97	A	C
ATOM	347	CD1	PHE	240	-3.866	-26.634	34.564	1.00	19.63	A	C
ATOM	348	CD2	PHE	240	-4.733	-28.694	33.711	1.00	19.35	A	C
ATOM	349	CE1	PHE	240	-4.383	-25.964	33.453	1.00	19.74	A	C
ATOM	350	CE2	PHE	240	-5.253	-28.036	32.599	1.00	17.91	A	C
ATOM	351	CZ	PHE	240	-5.078	-26.671	32.468	1.00	18.57	A	C
ATOM	352	C	PHE	240	-5.744	-29.089	36.826	1.00	28.16	A	C
ATOM	353	O	PHE	240	-6.083	-30.266	36.659	1.00	27.80	A	O
ATOM	354	N	TYR	241	-6.589	-28.068	36.705	1.00	29.22	A	N
ATOM	355	CA	TYR	241	-8.000	-28.265	36.415	1.00	29.23	A	C
ATOM	356	CB	TYR	241	-8.855	-27.628	37.508	1.00	29.89	A	C
ATOM	357	CG	TYR	241	-8.881	-28.384	38.803	1.00	31.46	A	C
ATOM	358	CD1	TYR	241	-7.819	-28.310	39.694	1.00	32.71	A	C
ATOM	359	CE1	TYR	241	-7.825	-29.036	40.879	1.00	34.78	A	C
ATOM	360	CD2	TYR	241	-9.959	-29.197	39.128	1.00	33.04	A	C
ATOM	361	CE2	TYR	241	-9.978	-29.926	40.312	1.00	35.15	A	C
ATOM	362	CZ	TYR	241	-8.907	-29.845	41.183	1.00	35.21	A	C
ATOM	363	OH	TYR	241	-8.908	-30.582	42.349	1.00	36.45	A	O
ATOM	364	C	TYR	241	-8.436	-27.672	35.099	1.00	29.32	A	C
ATOM	365	O	TYR	241	-7.817	-26.755	34.575	1.00	28.52	A	O
ATOM	366	N	TYR	242	-9.497	-28.246	34.557	1.00	31.03	A	N
ATOM	367	CA	TYR	242	-10.124	-27.762	33.343	1.00	33.41	A	C
ATOM	368	CB	TYR	242	-9.816	-28.622	32.123	1.00	33.07	A	C
ATOM	369	CG	TYR	242	-10.325	-27.985	30.856	1.00	33.45	A	C
ATOM	370	CD1	TYR	242	-9.880	-26.727	30.471	1.00	33.18	A	C
ATOM	371	CE1	TYR	242	-10.355	-26.119	29.325	1.00	33.73	A	C
ATOM	372	CD2	TYR	242	-11.273	-28.624	30.057	1.00	34.07	A	C
ATOM	373	CE2	TYR	242	-11.766	-28.018	28.902	1.00	34.11	A	C
ATOM	374	CZ	TYR	242	-11.298	-26.764	28.543	1.00	34.73	A	C
ATOM	375	OH	TYR	242	-11.763	-26.150	27.402	1.00	35.04	A	O
ATOM	376	C	TYR	242	-11.596	-27.854	33.726	1.00	35.48	A	C
ATOM	377	O	TYR	242	-12.181	-28.945	33.790	1.00	36.00	A	O
ATOM	378	N	ASP	243	-12.163	-26.693	34.038	1.00	36.76	A	N
ATOM	379	CA	ASP	243	-13.537	-26.564	34.498	1.00	37.20	A	C
ATOM	380	CB	ASP	243	-14.547	-26.282	33.366	1.00	38.81	A	C
ATOM	381	CG	ASP	243	-14.782	-27.453	32.457	1.00	40.37	A	C
ATOM	382	OD1	ASP	243	-15.951	-27.888	32.361	1.00	41.65	A	O
ATOM	383	OD2	ASP	243	-13.822	-27.903	31.802	1.00	42.30	A	O
ATOM	384	C	ASP	243	-13.985	-27.658	35.450	1.00	35.97	A	C
ATOM	385	O	ASP	243	-14.733	-28.554	35.090	1.00	34.99	A	O
ATOM	386	N	GLY	244	-13.411	-27.594	36.650	1.00	36.35	A	N
ATOM	387	CA	GLY	244	-13.719	-28.504	37.741	1.00	37.24	A	C
ATOM	388	C	GLY	244	-13.382	-29.976	37.643	1.00	37.46	A	C
ATOM	389	O	GLY	244	-13.967	-30.779	38.372	1.00	38.66	A	O
ATOM	390	N	LYS	245	-12.428	-30.344	36.796	1.00	36.89	A	N
ATOM	391	CA	LYS	245	-12.077	-31.752	36.653	1.00	36.18	A	C
ATOM	392	CB	LYS	245	-12.851	-32.367	35.481	1.00	36.07	A	C
ATOM	393	CG	LYS	245	-14.339	-32.535	35.767	1.00	37.86	A	C
ATOM	394	CD	LYS	245	-15.095	-33.093	34.578	1.00	40.57	A	C

ATOM	395	CE	LYS	245	-15.238	-32.049	33.476	1.00	42.77	A	C
ATOM	396	NZ	LYS	245	-15.946	-32.568	32.267	1.00	43.72	A	N
ATOM	397	C	LYS	245	-10.589	-31.975	36.479	1.00	34.82	A	C
ATOM	398	O	LYS	245	-10.050	-31.680	35.425	1.00	35.85	A	O
ATOM	399	N	VAL	246	-9.946	-32.528	37.508	1.00	33.31	A	N
ATOM	400	CA	VAL	246	-8.502	-32.814	37.514	1.00	32.41	A	C
ATOM	401	CB	VAL	246	-8.138	-33.876	38.604	1.00	32.47	A	C
ATOM	402	CG1	VAL	246	-6.657	-34.213	38.579	1.00	30.55	A	C
ATOM	403	CG2	VAL	246	-8.510	-33.352	39.979	1.00	33.77	A	C
ATOM	404	C	VAL	246	-7.982	-33.270	36.156	1.00	30.72	A	C
ATOM	405	O	VAL	246	-8.701	-33.915	35.398	1.00	30.29	A	O
ATOM	406	N	MET	247	-6.750	-32.881	35.837	1.00	29.75	A	N
ATOM	407	CA	MET	247	-6.142	-33.246	34.568	1.00	29.36	A	C
ATOM	408	CB	MET	247	-6.700	-32.350	33.468	1.00	29.45	A	C
ATOM	409	CG	MET	247	-6.102	-32.599	32.110	1.00	29.96	A	C
ATOM	410	SD	MET	247	-6.981	-31.672	30.867	1.00	31.60	A	S
ATOM	411	CE	MET	247	-7.144	-32.914	29.522	1.00	28.33	A	C
ATOM	412	C	MET	247	-4.608	-33.203	34.589	1.00	29.33	A	C
ATOM	413	O	MET	247	-4.001	-32.161	34.830	1.00	28.22	A	O
ATOM	414	N	LYS	248	-3.986	-34.355	34.363	1.00	30.49	A	N
ATOM	415	CA	LYS	248	-2.529	-34.440	34.349	1.00	31.99	A	C
ATOM	416	CB	LYS	248	-2.069	-35.832	34.774	1.00	32.22	A	C
ATOM	417	CG	LYS	248	-0.573	-36.029	34.715	1.00	34.19	A	C
ATOM	418	CD	LYS	248	-0.224	-37.391	34.092	1.00	37.79	A	C
ATOM	419	CE	LYS	248	-0.748	-37.544	32.641	1.00	37.14	A	C
ATOM	420	NZ	LYS	248	-0.189	-36.547	31.670	1.00	35.97	A	N
ATOM	421	C	LYS	248	-2.033	-34.122	32.940	1.00	33.13	A	C
ATOM	422	O	LYS	248	-2.397	-34.799	31.968	1.00	33.32	A	O
ATOM	423	N	LEU	249	-1.219	-33.073	32.834	1.00	33.44	A	N
ATOM	424	CA	LEU	249	-0.674	-32.635	31.549	1.00	32.24	A	C
ATOM	425	CB	LEU	249	-0.470	-31.117	31.562	1.00	31.63	A	C
ATOM	426	CG	LEU	249	-1.709	-30.272	31.880	1.00	30.95	A	C
ATOM	427	CD1	LEU	249	-1.337	-28.806	31.976	1.00	29.45	A	C
ATOM	428	CD2	LEU	249	-2.779	-30.497	30.816	1.00	30.97	A	C
ATOM	429	C	LEU	249	0.641	-33.336	31.208	1.00	31.24	A	C
ATOM	430	O	LEU	249	1.365	-33.775	32.099	1.00	30.96	A	O
ATOM	431	N	SER	250	0.928	-33.466	29.914	1.00	30.51	A	N
ATOM	432	CA	SER	250	2.163	-34.098	29.454	1.00	30.08	A	C
ATOM	433	CB	SER	250	2.177	-34.188	27.923	1.00	30.74	A	C
ATOM	434	OG	SER	250	2.271	-32.904	27.317	1.00	32.43	A	O
ATOM	435	C	SER	250	3.335	-33.239	29.935	1.00	29.71	A	C
ATOM	436	O	SER	250	3.134	-32.107	30.377	1.00	29.89	A	O
ATOM	437	N	PRO	251	4.566	-33.774	29.904	1.00	28.53	A	N
ATOM	438	CD	PRO	251	4.989	-35.165	29.682	1.00	27.77	A	C
ATOM	439	CA	PRO	251	5.697	-32.967	30.357	1.00	27.06	A	C
ATOM	440	CB	PRO	251	6.881	-33.874	30.065	1.00	26.71	A	C
ATOM	441	CG	PRO	251	6.322	-35.200	30.389	1.00	27.98	A	C
ATOM	442	C	PRO	251	5.819	-31.637	29.624	1.00	26.28	A	C
ATOM	443	O	PRO	251	5.872	-30.584	30.257	1.00	27.47	A	O
ATOM	444	N	LYS	252	5.770	-31.682	28.297	1.00	24.32	A	N
ATOM	445	CA	LYS	252	5.921	-30.481	27.484	1.00	22.71	A	C
ATOM	446	CB	LYS	252	5.921	-30.854	26.002	1.00	25.56	A	C
ATOM	447	CG	LYS	252	6.934	-30.078	25.174	1.00	29.51	A	C
ATOM	448	CD	LYS	252	6.810	-30.378	23.681	1.00	31.78	A	C
ATOM	449	CE	LYS	252	7.287	-31.769	23.321	1.00	33.28	A	C
ATOM	450	NZ	LYS	252	7.188	-31.987	21.846	1.00	34.91	A	N
ATOM	451	C	LYS	252	4.888	-29.395	27.776	1.00	21.06	A	C
ATOM	452	O	LYS	252	5.223	-28.216	27.825	1.00	20.39	A	O
ATOM	453	N	ALA	253	3.644	-29.805	28.005	1.00	20.19	A	N
ATOM	454	CA	ALA	253	2.547	-28.885	28.313	1.00	18.44	A	C
ATOM	455	CB	ALA	253	1.212	-29.541	27.976	1.00	16.11	A	C
ATOM	456	C	ALA	253	2.552	-28.393	29.782	1.00	18.01	A	C
ATOM	457	O	ALA	253	2.332	-27.207	30.048	1.00	17.87	A	O

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ATOM	458	N	GLU	254	2.816	-29.296	30.725	1.00	16.12	A	N
ATOM	459	CA	GLU	254	2.853	-28.943	32.135	1.00	15.25	A	C
ATOM	460	CB	GLU	254	3.077	-30.181	32.997	1.00	14.74	A	C
ATOM	461	CG	GLU	254	2.931	-29.957	34.499	1.00	15.00	A	C
ATOM	462	CD	GLU	254	3.566	-31.075	35.334	1.00	17.81	A	C
ATOM	463	OE1	GLU	254	4.560	-30.791	36.045	1.00	19.79	A	O
ATOM	464	OE2	GLU	254	3.077	-32.236	35.288	1.00	16.21	A	O
ATOM	465	C	GLU	254	3.953	-27.925	32.405	1.00	16.78	A	C
ATOM	466	O	GLU	254	3.928	-27.243	33.426	1.00	17.58	A	O
ATOM	467	N	GLU	255	4.927	-27.819	31.507	1.00	17.30	A	N
ATOM	468	CA	GLU	255	5.991	-26.845	31.713	1.00	18.93	A	C
ATOM	469	CB	GLU	255	7.256	-27.231	30.964	1.00	20.90	A	C
ATOM	470	CG	GLU	255	8.400	-26.273	31.231	1.00	25.41	A	C
ATOM	471	CD	GLU	255	9.567	-26.481	30.294	1.00	30.42	A	C
ATOM	472	OE1	GLU	255	10.714	-26.602	30.790	1.00	32.17	A	O
ATOM	473	OE2	GLU	255	9.338	-26.521	29.058	1.00	31.74	A	O
ATOM	474	C	GLU	255	5.568	-25.428	31.309	1.00	18.98	A	C
ATOM	475	O	GLU	255	5.836	-24.462	32.034	1.00	18.02	A	O
ATOM	476	N	VAL	256	4.929	-25.305	30.143	1.00	18.64	A	N
ATOM	477	CA	VAL	256	4.468	-24.007	29.644	1.00	16.57	A	C
ATOM	478	CB	VAL	256	3.899	-24.114	28.211	1.00	16.00	A	C
ATOM	479	CG1	VAL	256	3.475	-22.747	27.702	1.00	13.70	A	C
ATOM	480	CG2	VAL	256	4.944	-24.730	27.277	1.00	15.81	A	C
ATOM	481	C	VAL	256	3.408	-23.437	30.576	1.00	16.47	A	C
ATOM	482	O	VAL	256	3.376	-22.226	30.826	1.00	16.34	A	O
ATOM	483	N	ALA	257	2.581	-24.324	31.126	1.00	15.84	A	N
ATOM	484	CA	ALA	257	1.523	-23.931	32.052	1.00	15.82	A	C
ATOM	485	CB	ALA	257	0.608	-25.106	32.348	1.00	17.12	A	C
ATOM	486	C	ALA	257	2.088	-23.366	33.346	1.00	15.25	A	C
ATOM	487	O	ALA	257	1.464	-22.495	33.958	1.00	14.13	A	O
ATOM	488	N	THR	258	3.247	-23.878	33.776	1.00	15.67	A	N
ATOM	489	CA	THR	258	3.889	-23.380	34.997	1.00	15.19	A	C
ATOM	490	CB	THR	258	5.140	-24.212	35.443	1.00	14.24	A	C
ATOM	491	OG1	THR	258	6.170	-24.118	34.461	1.00	14.57	A	O
ATOM	492	CG2	THR	258	4.796	-25.671	35.634	1.00	13.07	A	C
ATOM	493	C	THR	258	4.305	-21.928	34.758	1.00	15.27	A	C
ATOM	494	O	THR	258	4.037	-21.062	35.592	1.00	16.28	A	O
ATOM	495	N	PHE	259	4.886	-21.655	33.586	1.00	14.64	A	N
ATOM	496	CA	PHE	259	5.314	-20.299	33.237	1.00	13.33	A	C
ATOM	497	CB	PHE	259	5.725	-20.192	31.765	1.00	12.06	A	C
ATOM	498	CG	PHE	259	6.891	-21.057	31.379	1.00	11.32	A	C
ATOM	499	CD1	PHE	259	7.720	-21.614	32.333	1.00	11.14	A	C
ATOM	500	CD2	PHE	259	7.115	-21.365	30.037	1.00	13.60	A	C
ATOM	501	CE1	PHE	259	8.752	-22.481	31.957	1.00	12.92	A	C
ATOM	502	CE2	PHE	259	8.136	-22.221	29.648	1.00	13.09	A	C
ATOM	503	CZ	PHE	259	8.955	-22.783	30.609	1.00	13.52	A	C
ATOM	504	C	PHE	259	4.159	-19.345	33.488	1.00	12.52	A	C
ATOM	505	O	PHE	259	4.316	-18.338	34.167	1.00	13.07	A	O
ATOM	506	N	PHE	260	2.985	-19.711	32.988	1.00	12.14	A	N
ATOM	507	CA	PHE	260	1.782	-18.894	33.149	1.00	12.70	A	C
ATOM	508	CB	PHE	260	0.667	-19.429	32.238	1.00	10.03	A	C
ATOM	509	CG	PHE	260	-0.490	-18.492	32.072	1.00	6.12	A	C
ATOM	510	CD1	PHE	260	-0.462	-17.508	31.109	1.00	4.43	A	C
ATOM	511	CD2	PHE	260	-1.608	-18.592	32.886	1.00	7.16	A	C
ATOM	512	CE1	PHE	260	-1.523	-16.631	30.956	1.00	4.04	A	C
ATOM	513	CE2	PHE	260	-2.681	-17.713	32.740	1.00	4.92	A	C
ATOM	514	CZ	PHE	260	-2.634	-16.732	31.774	1.00	3.93	A	C
ATOM	515	C	PHE	260	1.325	-18.880	34.610	1.00	12.88	A	C
ATOM	516	O	PHE	260	0.816	-17.871	35.098	1.00	13.30	A	O
ATOM	517	N	ALA	261	1.537	-19.992	35.306	1.00	13.09	A	N
ATOM	518	CA	ALA	261	1.138	-20.107	36.703	1.00	14.32	A	C
ATOM	519	CB	ALA	261	1.273	-21.543	37.170	1.00	15.43	A	C
ATOM	520	C	ALA	261	1.937	-19.182	37.608	1.00	14.64	A	C

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ATOM	521	O	ALA	261	1.437	-18.717	38.641	1.00	15.56	A	O
ATOM	522	N	LYS	262	3.176	-18.913	37.213	1.00	14.03	A	N
ATOM	523	CA	LYS	262	4.044	-18.032	37.982	1.00	14.06	A	C
ATOM	524	CB	LYS	262	5.509	-18.356	37.723	1.00	12.73	A	C
ATOM	525	CG	LYS	262	5.941	-19.708	38.191	1.00	11.37	A	C
ATOM	526	CD	LYS	262	7.419	-19.833	37.954	1.00	14.34	A	C
ATOM	527	CE	LYS	262	7.925	-21.249	38.124	1.00	15.10	A	C
ATOM	528	NZ	LYS	262	9.410	-21.259	37.970	1.00	16.63	A	N
ATOM	529	C	LYS	262	3.810	-16.539	37.752	1.00	13.93	A	C
ATOM	530	O	LYS	262	4.308	-15.728	38.512	1.00	13.90	A	O
ATOM	531	N	MET	263	3.116	-16.175	36.681	1.00	14.97	A	N
ATOM	532	CA	MET	263	2.832	-14.763	36.398	1.00	18.56	A	C
ATOM	533	CB	MET	263	3.110	-14.436	34.930	1.00	17.76	A	C
ATOM	534	CG	MET	263	4.477	-14.802	34.438	1.00	17.35	A	C
ATOM	535	SD	MET	263	4.555	-14.632	32.646	1.00	17.77	A	S
ATOM	536	CE	MET	263	5.914	-13.494	32.450	1.00	16.01	A	C
ATOM	537	C	MET	263	1.360	-14.428	36.680	1.00	20.41	A	C
ATOM	538	O	MET	263	0.900	-13.320	36.391	1.00	20.06	A	O
ATOM	539	N	LEU	264	0.638	-15.382	37.260	1.00	22.73	A	N
ATOM	540	CA	LEU	264	-0.783	-15.227	37.535	1.00	24.78	A	C
ATOM	541	CB	LEU	264	-1.296	-16.430	38.314	1.00	24.77	A	C
ATOM	542	CG	LEU	264	-2.752	-16.751	37.998	1.00	25.57	A	C
ATOM	543	CD1	LEU	264	-2.836	-17.115	36.509	1.00	24.10	A	C
ATOM	544	CD2	LEU	264	-3.267	-17.894	38.896	1.00	25.17	A	C
ATOM	545	C	LEU	264	-1.195	-13.959	38.258	1.00	26.21	A	C
ATOM	546	O	LEU	264	-2.323	-13.498	38.101	1.00	27.87	A	O
ATOM	547	N	ASP	265	-0.287	-13.405	39.056	1.00	27.67	A	N
ATOM	548	CA	ASP	265	-0.573	-12.195	39.822	1.00	27.70	A	C
ATOM	549	CB	ASP	265	0.191	-12.209	41.146	1.00	29.80	A	C
ATOM	550	CG	ASP	265	-0.445	-13.124	42.172	1.00	31.24	A	C
ATOM	551	OD1	ASP	265	-0.307	-14.359	42.048	1.00	33.10	A	O
ATOM	552	OD2	ASP	265	-1.099	-12.609	43.102	1.00	33.49	A	O
ATOM	553	C	ASP	265	-0.318	-10.893	39.092	1.00	26.63	A	C
ATOM	554	O	ASP	265	-0.626	-9.833	39.616	1.00	26.64	A	O
ATOM	555	N	HIS	266	0.229	-10.966	37.885	1.00	26.28	A	N
ATOM	556	CA	HIS	266	0.503	-9.761	37.114	1.00	27.30	A	C
ATOM	557	CB	HIS	266	1.814	-9.897	36.359	1.00	27.26	A	C
ATOM	558	CG	HIS	266	3.019	-9.902	37.244	1.00	28.66	A	C
ATOM	559	CD2	HIS	266	3.797	-8.889	37.694	1.00	28.73	A	C
ATOM	560	ND1	HIS	266	3.564	-11.062	37.752	1.00	29.50	A	N
ATOM	561	CE1	HIS	266	4.631	-10.763	38.472	1.00	30.47	A	C
ATOM	562	NE2	HIS	266	4.794	-9.451	38.453	1.00	29.65	A	N
ATOM	563	C	HIS	266	-0.620	-9.383	36.159	1.00	27.77	A	C
ATOM	564	O	HIS	266	-1.225	-10.242	35.529	1.00	28.28	A	O
ATOM	565	N	GLU	267	-0.867	-8.081	36.040	1.00	28.65	A	N
ATOM	566	CA	GLU	267	-1.919	-7.548	35.183	1.00	29.09	A	C
ATOM	567	CB	GLU	267	-1.988	-6.026	35.316	1.00	32.52	A	C
ATOM	568	CG	GLU	267	-3.403	-5.481	35.445	1.00	37.46	A	C
ATOM	569	CD	GLU	267	-4.086	-5.910	36.748	1.00	40.43	A	C
ATOM	570	OE1	GLU	267	-3.822	-5.268	37.796	1.00	41.07	A	O
ATOM	571	OE2	GLU	267	-4.888	-6.882	36.718	1.00	40.76	A	O
ATOM	572	C	GLU	267	-1.757	-7.908	33.714	1.00	28.00	A	C
ATOM	573	O	GLU	267	-2.748	-8.146	33.019	1.00	28.86	A	O
ATOM	574	N	TYR	268	-0.516	-7.941	33.236	1.00	24.95	A	N
ATOM	575	CA	TYR	268	-0.284	-8.269	31.843	1.00	23.08	A	C
ATOM	576	CB	TYR	268	1.201	-8.129	31.457	1.00	23.45	A	C
ATOM	577	CG	TYR	268	2.189	-8.968	32.249	1.00	23.28	A	C
ATOM	578	CD1	TYR	268	2.350	-10.334	31.994	1.00	23.37	A	C
ATOM	579	CE1	TYR	268	3.257	-11.105	32.721	1.00	23.56	A	C
ATOM	580	CD2	TYR	268	2.967	-8.392	33.252	1.00	23.30	A	C
ATOM	581	CE2	TYR	268	3.877	-9.151	33.983	1.00	24.34	A	C
ATOM	582	CZ	TYR	268	4.016	-10.505	33.714	1.00	24.54	A	C
ATOM	583	OH	TYR	268	4.907	-11.247	34.450	1.00	25.11	A	O

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ATOM	584	C	TYR	268	-0.856	-9.625	31.421	1.00	23.44	A	C
ATOM	585	O	TYR	268	-0.883	-9.933	30.228	1.00	23.86	A	O
ATOM	586	N	THR	269	-1.323	-10.432	32.375	1.00	21.98	A	N
ATOM	587	CA	THR	269	-1.899	-11.723	32.011	1.00	21.43	A	C
ATOM	588	CB	THR	269	-1.621	-12.849	33.036	1.00	20.89	A	C
ATOM	589	OG1	THR	269	-2.168	-12.501	34.310	1.00	22.61	A	O
ATOM	590	CG2	THR	269	-0.147	-13.104	33.163	1.00	20.43	A	C
ATOM	591	C	THR	269	-3.398	-11.626	31.755	1.00	20.83	A	C
ATOM	592	O	THR	269	-4.039	-12.629	31.437	1.00	22.39	A	O
ATOM	593	N	THR	270	-3.965	-10.434	31.921	1.00	19.37	A	N
ATOM	594	CA	THR	270	-5.391	-10.238	31.651	1.00	17.87	A	C
ATOM	595	CB	THR	270	-6.059	-9.353	32.703	1.00	17.95	A	C
ATOM	596	OG1	THR	270	-5.506	-8.032	32.637	1.00	18.56	A	O
ATOM	597	CG2	THR	270	-5.843	-9.922	34.086	1.00	18.03	A	C
ATOM	598	C	THR	270	-5.544	-9.559	30.291	1.00	16.71	A	C
ATOM	599	O	THR	270	-6.647	-9.272	29.851	1.00	15.90	A	O
ATOM	600	N	LYS	271	-4.422	-9.331	29.623	1.00	15.50	A	N
ATOM	601	CA	LYS	271	-4.403	-8.676	28.329	1.00	15.42	A	C
ATOM	602	CB	LYS	271	-3.068	-7.955	28.163	1.00	14.91	A	C
ATOM	603	CG	LYS	271	-2.821	-6.915	29.228	1.00	16.24	A	C
ATOM	604	CD	LYS	271	-1.600	-6.080	28.898	1.00	20.55	A	C
ATOM	605	CE	LYS	271	-1.432	-4.907	29.858	1.00	22.63	A	C
ATOM	606	NZ	LYS	271	-0.156	-4.176	29.561	1.00	24.07	A	N
ATOM	607	C	LYS	271	-4.675	-9.573	27.114	1.00	15.45	A	C
ATOM	608	O	LYS	271	-4.059	-10.630	26.964	1.00	14.22	A	O
ATOM	609	N	GLU	272	-5.551	-9.099	26.221	1.00	15.76	A	N
ATOM	610	CA	GLU	272	-5.933	-9.814	24.995	1.00	16.64	A	C
ATOM	611	CB	GLU	272	-6.565	-8.862	23.971	1.00	19.26	A	C
ATOM	612	CG	GLU	272	-8.078	-8.743	24.034	1.00	24.50	A	C
ATOM	613	CD	GLU	272	-8.791	-10.003	23.579	1.00	28.39	A	C
ATOM	614	OE1	GLU	272	-8.554	-10.438	22.429	1.00	31.02	A	O
ATOM	615	OE2	GLU	272	-9.598	-10.554	24.367	1.00	31.54	A	O
ATOM	616	C	GLU	272	-4.765	-10.503	24.330	1.00	14.84	A	C
ATOM	617	O	GLU	272	-4.725	-11.721	24.237	1.00	16.50	A	O
ATOM	618	N	ILE	273	-3.795	-9.712	23.907	1.00	12.39	A	N
ATOM	619	CA	ILE	273	-2.622	-10.230	23.227	1.00	9.60	A	C
ATOM	620	CB	ILE	273	-1.683	-9.096	22.842	1.00	8.42	A	C
ATOM	621	CG2	ILE	273	-0.531	-9.632	22.050	1.00	7.77	A	C
ATOM	622	CG1	ILE	273	-2.431	-8.051	22.027	1.00	7.45	A	C
ATOM	623	CD1	ILE	273	-1.672	-6.770	21.905	1.00	9.63	A	C
ATOM	624	C	ILE	273	-1.832	-11.275	24.010	1.00	8.43	A	C
ATOM	625	O	ILE	273	-1.494	-12.321	23.456	1.00	7.91	A	O
ATOM	626	N	PHE	274	-1.532	-10.991	25.280	1.00	6.65	A	N
ATOM	627	CA	PHE	274	-0.757	-11.910	26.123	1.00	5.10	A	C
ATOM	628	CB	PHE	274	-0.553	-11.337	27.536	1.00	4.57	A	C
ATOM	629	CG	PHE	274	0.354	-12.171	28.405	1.00	2.23	A	C
ATOM	630	CD1	PHE	274	1.697	-11.844	28.544	1.00	2.86	A	C
ATOM	631	CD2	PHE	274	-0.108	-13.332	29.006	1.00	2.28	A	C
ATOM	632	CE1	PHE	274	2.561	-12.661	29.250	1.00	1.00	A	C
ATOM	633	CE2	PHE	274	0.756	-14.156	29.714	1.00	1.00	A	C
ATOM	634	CZ	PHE	274	2.086	-13.822	29.832	1.00	1.00	A	C
ATOM	635	C	PHE	274	-1.454	-13.250	26.204	1.00	5.77	A	C
ATOM	636	O	PHE	274	-0.831	-14.284	25.994	1.00	6.92	A	O
ATOM	637	N	ARG	275	-2.756	-13.216	26.478	1.00	5.52	A	N
ATOM	638	CA	ARG	275	-3.563	-14.420	26.576	1.00	5.25	A	C
ATOM	639	CB	ARG	275	-4.954	-14.078	27.101	1.00	4.80	A	C
ATOM	640	CG	ARG	275	-4.909	-13.499	28.496	1.00	5.17	A	C
ATOM	641	CD	ARG	275	-6.264	-13.030	28.958	1.00	4.57	A	C
ATOM	642	NE	ARG	275	-7.153	-14.138	29.266	1.00	6.24	A	N
ATOM	643	CZ	ARG	275	-7.045	-14.915	30.341	1.00	7.40	A	C
ATOM	644	NH1	ARG	275	-6.079	-14.706	31.225	1.00	7.32	A	N
ATOM	645	NH2	ARG	275	-7.888	-15.925	30.515	1.00	8.13	A	N
ATOM	646	C	ARG	275	-3.668	-15.131	25.240	1.00	6.40	A	C



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ATOM	647	O	ARG	275	-3.515	-16.352	25.178	1.00	7.11	A	O
ATOM	648	N	LYS	276	-3.930	-14.373	24.177	1.00	6.18	A	N
ATOM	649	CA	LYS	276	-4.054	-14.940	22.837	1.00	6.00	A	C
ATOM	650	CB	LYS	276	-4.409	-13.853	21.820	1.00	7.54	A	C
ATOM	651	CG	LYS	276	-4.097	-14.210	20.365	1.00	9.50	A	C
ATOM	652	CD	LYS	276	-4.690	-13.196	19.397	1.00	12.47	A	C
ATOM	653	CE	LYS	276	-4.355	-11.750	19.781	1.00	15.06	A	C
ATOM	654	NZ	LYS	276	-2.909	-11.400	19.690	1.00	17.29	A	N
ATOM	655	C	LYS	276	-2.750	-15.591	22.444	1.00	6.74	A	C
ATOM	656	O	LYS	276	-2.718	-16.762	22.075	1.00	6.25	A	O
ATOM	657	N	ASN	277	-1.673	-14.817	22.550	1.00	8.40	A	N
ATOM	658	CA	ASN	277	-0.343	-15.280	22.211	1.00	8.46	A	C
ATOM	659	CB	ASN	277	0.668	-14.167	22.429	1.00	11.06	A	C
ATOM	660	CG	ASN	277	0.754	-13.214	21.258	1.00	12.88	A	C
ATOM	661	OD1	ASN	277	1.195	-12.075	21.417	1.00	13.28	A	O
ATOM	662	ND2	ASN	277	0.382	-13.687	20.063	1.00	12.75	A	N
ATOM	663	C	ASN	277	0.056	-16.488	23.025	1.00	8.36	A	C
ATOM	664	O	ASN	277	0.566	-17.461	22.467	1.00	9.65	A	O
ATOM	665	N	PHE	278	-0.169	-16.428	24.339	1.00	6.74	A	N
ATOM	666	CA	PHE	278	0.182	-17.533	25.219	1.00	6.85	A	C
ATOM	667	CB	PHE	278	-0.051	-17.192	26.676	1.00	5.87	A	C
ATOM	668	CG	PHE	278	-0.028	-18.395	27.564	1.00	5.81	A	C
ATOM	669	CD1	PHE	278	1.164	-19.076	27.795	1.00	4.47	A	C
ATOM	670	CD2	PHE	278	-1.202	-18.883	28.121	1.00	3.77	A	C
ATOM	671	CE1	PHE	278	1.184	-20.223	28.562	1.00	4.55	A	C
ATOM	672	CE2	PHE	278	-1.190	-20.026	28.885	1.00	4.33	A	C
ATOM	673	CZ	PHE	278	0.006	-20.700	29.107	1.00	4.83	A	C
ATOM	674	C	PHE	278	-0.575	-18.812	24.934	1.00	7.27	A	C
ATOM	675	O	PHE	278	-0.010	-19.899	24.993	1.00	8.74	A	O
ATOM	676	N	PHE	279	-1.871	-18.689	24.704	1.00	7.64	A	N
ATOM	677	CA	PHE	279	-2.669	-19.862	24.439	1.00	7.41	A	C
ATOM	678	CB	PHE	279	-4.153	-19.517	24.386	1.00	9.21	A	C
ATOM	679	CG	PHE	279	-5.025	-20.720	24.266	1.00	9.86	A	C
ATOM	680	CD1	PHE	279	-5.209	-21.560	25.363	1.00	9.93	A	C
ATOM	681	CD2	PHE	279	-5.575	-21.072	23.041	1.00	9.87	A	C
ATOM	682	CE1	PHE	279	-5.918	-22.740	25.241	1.00	12.87	A	C
ATOM	683	CE2	PHE	279	-6.285	-22.245	22.905	1.00	12.14	A	C
ATOM	684	CZ	PHE	279	-6.457	-23.090	24.012	1.00	13.37	A	C
ATOM	685	C	PHE	279	-2.288	-20.575	23.161	1.00	6.28	A	C
ATOM	686	O	PHE	279	-2.276	-21.799	23.114	1.00	5.07	A	O
ATOM	687	N	LYS	280	-2.012	-19.810	22.117	1.00	5.54	A	N
ATOM	688	CA	LYS	280	-1.658	-20.399	20.843	1.00	6.41	A	C
ATOM	689	CB	LYS	280	-1.484	-19.317	19.789	1.00	5.63	A	C
ATOM	690	CG	LYS	280	-1.042	-19.783	18.423	1.00	5.75	A	C
ATOM	691	CD	LYS	280	-1.480	-18.743	17.388	1.00	9.35	A	C
ATOM	692	CE	LYS	280	-1.089	-19.085	15.953	1.00	10.66	A	C
ATOM	693	NZ	LYS	280	0.385	-19.020	15.743	1.00	12.76	A	N
ATOM	694	C	LYS	280	-0.400	-21.217	20.987	1.00	9.41	A	C
ATOM	695	O	LYS	280	-0.378	-22.383	20.609	1.00	9.92	A	O
ATOM	696	N	ASP	281	0.616	-20.640	21.621	1.00	11.90	A	N
ATOM	697	CA	ASP	281	1.873	-21.341	21.799	1.00	14.21	A	C
ATOM	698	CB	ASP	281	2.983	-20.376	22.214	1.00	17.27	A	C
ATOM	699	CG	ASP	281	3.605	-19.664	21.019	1.00	20.74	A	C
ATOM	700	OD1	ASP	281	4.829	-19.419	21.030	1.00	24.78	A	O
ATOM	701	OD2	ASP	281	2.874	-19.356	20.054	1.00	21.54	A	O
ATOM	702	C	ASP	281	1.794	-22.537	22.726	1.00	14.80	A	C
ATOM	703	O	ASP	281	2.475	-23.530	22.498	1.00	15.72	A	O
ATOM	704	N	TRP	282	0.962	-22.457	23.760	1.00	14.81	A	N
ATOM	705	CA	TRP	282	0.804	-23.570	24.686	1.00	15.13	A	C
ATOM	706	CB	TRP	282	-0.118	-23.180	25.841	1.00	15.01	A	C
ATOM	707	CG	TRP	282	-0.302	-24.251	26.878	1.00	15.50	A	C
ATOM	708	CD2	TRP	282	-1.367	-24.352	27.838	1.00	16.46	A	C
ATOM	709	CE2	TRP	282	-1.107	-25.491	28.630	1.00	16.32	A	C

ATOM	710	CE3	TRP	282	-2.512	-23.590	28.109	1.00	15.37	A	C
ATOM	711	CD1	TRP	282	0.526	-25.305	27.122	1.00	15.55	A	C
ATOM	712	NE1	TRP	282	0.054	-26.052	28.169	1.00	15.67	A	N
ATOM	713	CZ2	TRP	282	-1.947	-25.885	29.676	1.00	16.02	A	C
ATOM	714	CZ3	TRP	282	-3.346	-23.984	29.152	1.00	14.68	A	C
ATOM	715	CH2	TRP	282	-3.057	-25.120	29.920	1.00	15.33	A	C
ATOM	716	C	TRP	282	0.202	-24.743	23.932	1.00	17.08	A	C
ATOM	717	O	TRP	282	0.483	-25.894	24.238	1.00	20.09	A	O
ATOM	718	N	ARG	283	-0.601	-24.454	22.918	1.00	18.62	A	N
ATOM	719	CA	ARG	283	-1.239	-25.504	22.142	1.00	20.31	A	C
ATOM	720	CB	ARG	283	-2.275	-24.911	21.193	1.00	20.39	A	C
ATOM	721	CG	ARG	283	-3.454	-24.278	21.896	1.00	19.80	A	C
ATOM	722	CD	ARG	283	-4.598	-25.247	22.022	1.00	19.86	A	C
ATOM	723	NE	ARG	283	-5.097	-25.650	20.712	1.00	19.39	A	N
ATOM	724	CZ	ARG	283	-6.100	-26.498	20.521	1.00	18.30	A	C
ATOM	725	NH1	ARG	283	-6.735	-27.037	21.557	1.00	16.40	A	N
ATOM	726	NH2	ARG	283	-6.414	-26.864	19.287	1.00	18.05	A	N
ATOM	727	C	ARG	283	-0.239	-26.342	21.367	1.00	21.76	A	C
ATOM	728	O	ARG	283	-0.326	-27.564	21.383	1.00	24.03	A	O
ATOM	729	N	LYS	284	0.723	-25.697	20.713	1.00	21.64	A	N
ATOM	730	CA	LYS	284	1.733	-26.414	19.936	1.00	22.10	A	C
ATOM	731	CB	LYS	284	2.783	-25.453	19.373	1.00	22.69	A	C
ATOM	732	CG	LYS	284	2.248	-24.406	18.418	1.00	23.29	A	C
ATOM	733	CD	LYS	284	3.245	-23.271	18.253	1.00	25.09	A	C
ATOM	734	CE	LYS	284	2.568	-22.043	17.652	1.00	27.89	A	C
ATOM	735	NZ	LYS	284	3.448	-20.833	17.635	1.00	28.97	A	N
ATOM	736	C	LYS	284	2.440	-27.455	20.782	1.00	22.92	A	C
ATOM	737	O	LYS	284	3.042	-28.372	20.243	1.00	23.91	A	O
ATOM	738	N	GLU	285	2.385	-27.290	22.104	1.00	24.66	A	N
ATOM	739	CA	GLU	285	3.025	-28.213	23.032	1.00	25.28	A	C
ATOM	740	CB	GLU	285	3.863	-27.462	24.064	1.00	26.79	A	C
ATOM	741	CG	GLU	285	5.334	-27.346	23.704	1.00	30.45	A	C
ATOM	742	CD	GLU	285	5.680	-26.109	22.884	1.00	34.41	A	C
ATOM	743	OE1	GLU	285	4.824	-25.585	22.135	1.00	36.07	A	O
ATOM	744	OE2	GLU	285	6.834	-25.649	22.992	1.00	35.84	A	O
ATOM	745	C	GLU	285	2.085	-29.181	23.738	1.00	25.68	A	C
ATOM	746	O	GLU	285	2.450	-29.749	24.768	1.00	26.05	A	O
ATOM	747	N	MET	286	0.880	-29.362	23.198	1.00	25.25	A	N
ATOM	748	CA	MET	286	-0.085	-30.304	23.773	1.00	24.79	A	C
ATOM	749	CB	MET	286	-1.483	-29.689	23.856	1.00	22.58	A	C
ATOM	750	CG	MET	286	-1.657	-28.632	24.915	1.00	22.27	A	C
ATOM	751	SD	MET	286	-3.349	-27.975	24.913	1.00	21.28	A	S
ATOM	752	CE	MET	286	-3.151	-26.487	25.854	1.00	20.02	A	C
ATOM	753	C	MET	286	-0.172	-31.576	22.925	1.00	25.59	A	C
ATOM	754	O	MET	286	0.071	-31.538	21.715	1.00	24.60	A	O
ATOM	755	N	THR	287	-0.486	-32.697	23.582	1.00	26.86	A	N
ATOM	756	CA	THR	287	-0.670	-33.997	22.919	1.00	27.74	A	C
ATOM	757	CB	THR	287	-0.698	-35.180	23.931	1.00	27.25	A	C
ATOM	758	OG1	THR	287	-1.847	-35.069	24.782	1.00	26.86	A	O
ATOM	759	CG2	THR	287	0.553	-35.212	24.786	1.00	25.91	A	C
ATOM	760	C	THR	287	-2.062	-33.917	22.320	1.00	29.43	A	C
ATOM	761	O	THR	287	-2.760	-32.935	22.528	1.00	31.04	A	O
ATOM	762	N	ASN	288	-2.506	-34.947	21.619	1.00	32.31	A	N
ATOM	763	CA	ASN	288	-3.851	-34.875	21.058	1.00	35.24	A	C
ATOM	764	CB	ASN	288	-3.999	-35.773	19.830	1.00	35.29	A	C
ATOM	765	CG	ASN	288	-3.570	-35.065	18.554	1.00	34.83	A	C
ATOM	766	OD1	ASN	288	-2.379	-34.896	18.291	1.00	33.07	A	O
ATOM	767	ND2	ASN	288	-4.547	-34.596	17.784	1.00	35.27	A	N
ATOM	768	C	ASN	288	-4.976	-35.063	22.085	1.00	35.99	A	C
ATOM	769	O	ASN	288	-6.027	-34.430	21.972	1.00	34.74	A	O
ATOM	770	N	GLU	289	-4.729	-35.880	23.109	1.00	38.03	A	N
ATOM	771	CA	GLU	289	-5.705	-36.093	24.182	1.00	39.41	A	C
ATOM	772	CB	GLU	289	-5.146	-37.018	25.267	1.00	40.67	A	C

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ATOM	773	CG	GLU	289	-4.985	-38.464	24.865	1.00	45.06	A	C
ATOM	774	CD	GLU	289	-4.027	-39.212	25.783	1.00	47.76	A	C
ATOM	775	OE1	GLU	289	-2.804	-38.927	25.713	1.00	49.15	A	O
ATOM	776	OE2	GLU	289	-4.490	-40.080	26.565	1.00	48.03	A	O
ATOM	777	C	GLU	289	-5.980	-34.738	24.828	1.00	38.83	A	C
ATOM	778	O	GLU	289	-7.105	-34.453	25.225	1.00	38.93	A	O
ATOM	779	N	GLU	290	-4.934	-33.919	24.947	1.00	38.45	A	N
ATOM	780	CA	GLU	290	-5.042	-32.584	25.543	1.00	37.24	A	C
ATOM	781	CB	GLU	290	-3.662	-32.063	25.966	1.00	36.97	A	C
ATOM	782	CG	GLU	290	-2.922	-32.946	26.962	1.00	38.67	A	C
ATOM	783	CD	GLU	290	-1.540	-32.409	27.304	1.00	39.87	A	C
ATOM	784	OE1	GLU	290	-1.411	-31.728	28.340	1.00	41.59	A	O
ATOM	785	OE2	GLU	290	-0.581	-32.660	26.542	1.00	39.76	A	O
ATOM	786	C	GLU	290	-5.667	-31.594	24.562	1.00	35.53	A	C
ATOM	787	O	GLU	290	-6.690	-30.966	24.854	1.00	35.19	A	O
ATOM	788	N	LYS	291	-5.044	-31.486	23.393	1.00	33.45	A	N
ATOM	789	CA	LYS	291	-5.476	-30.588	22.333	1.00	31.82	A	C
ATOM	790	CB	LYS	291	-4.665	-30.870	21.073	1.00	30.18	A	C
ATOM	791	CG	LYS	291	-4.660	-29.738	20.081	1.00	30.60	A	C
ATOM	792	CD	LYS	291	-3.622	-29.940	18.978	1.00	29.97	A	C
ATOM	793	CE	LYS	291	-2.202	-29.718	19.489	1.00	31.56	A	C
ATOM	794	NZ	LYS	291	-1.142	-29.866	18.438	1.00	30.50	A	N
ATOM	795	C	LYS	291	-6.974	-30.668	22.039	1.00	32.07	A	C
ATOM	796	O	LYS	291	-7.586	-29.659	21.697	1.00	32.56	A	O
ATOM	797	N	ASN	292	-7.561	-31.855	22.195	1.00	31.44	A	N
ATOM	798	CA	ASN	292	-8.990	-32.053	21.957	1.00	30.09	A	C
ATOM	799	CB	ASN	292	-9.308	-33.525	21.711	1.00	31.10	A	C
ATOM	800	CG	ASN	292	-8.958	-33.972	20.308	1.00	32.75	A	C
ATOM	801	OD1	ASN	292	-8.643	-33.152	19.444	1.00	33.36	A	O
ATOM	802	ND2	ASN	292	-9.017	-35.280	20.070	1.00	32.28	A	N
ATOM	803	C	ASN	292	-9.878	-31.550	23.085	1.00	29.65	A	C
ATOM	804	O	ASN	292	-10.963	-31.032	22.827	1.00	29.92	A	O
ATOM	805	N	ILE	293	-9.424	-31.711	24.329	1.00	28.93	A	N
ATOM	806	CA	ILE	293	-10.193	-31.285	25.503	1.00	27.67	A	C
ATOM	807	CB	ILE	293	-9.865	-32.133	26.728	1.00	28.46	A	C
ATOM	808	CG2	ILE	293	-10.864	-31.849	27.822	1.00	28.92	A	C
ATOM	809	CG1	ILE	293	-9.907	-33.614	26.378	1.00	29.73	A	C
ATOM	810	CD1	ILE	293	-9.353	-34.508	27.471	1.00	31.32	A	C
ATOM	811	C	ILE	293	-10.003	-29.822	25.909	1.00	26.84	A	C
ATOM	812	O	ILE	293	-10.964	-29.164	26.310	1.00	25.47	A	O
ATOM	813	N	ILE	294	-8.758	-29.343	25.870	1.00	25.57	A	N
ATOM	814	CA	ILE	294	-8.455	-27.959	26.239	1.00	24.70	A	C
ATOM	815	CB	ILE	294	-7.013	-27.792	26.741	1.00	23.31	A	C
ATOM	816	CG2	ILE	294	-6.796	-26.343	27.156	1.00	23.08	A	C
ATOM	817	CG1	ILE	294	-6.759	-28.732	27.928	1.00	23.84	A	C
ATOM	818	CD1	ILE	294	-5.353	-28.675	28.524	1.00	22.79	A	C
ATOM	819	C	ILE	294	-8.679	-27.009	25.073	1.00	24.94	A	C
ATOM	820	O	ILE	294	-7.747	-26.708	24.315	1.00	26.45	A	O
ATOM	821	N	THR	295	-9.915	-26.526	24.950	1.00	24.08	A	N
ATOM	822	CA	THR	295	-10.290	-25.613	23.867	1.00	22.12	A	C
ATOM	823	CB	THR	295	-11.824	-25.644	23.586	1.00	21.92	A	C
ATOM	824	OG1	THR	295	-12.532	-24.965	24.637	1.00	23.05	A	O
ATOM	825	CG2	THR	295	-12.321	-27.059	23.509	1.00	20.81	A	C
ATOM	826	C	THR	295	-9.868	-24.154	24.087	1.00	21.13	A	C
ATOM	827	O	THR	295	-9.426	-23.502	23.148	1.00	21.06	A	O
ATOM	828	N	ASN	296	-9.993	-23.661	25.321	1.00	18.30	A	N
ATOM	829	CA	ASN	296	-9.667	-22.278	25.655	1.00	15.98	A	C
ATOM	830	CB	ASN	296	-10.965	-21.474	25.765	1.00	16.73	A	C
ATOM	831	CG	ASN	296	-11.771	-21.821	27.021	1.00	18.92	A	C
ATOM	832	OD1	ASN	296	-11.892	-21.001	27.950	1.00	16.67	A	O
ATOM	833	ND2	ASN	296	-12.320	-23.046	27.058	1.00	18.29	A	N
ATOM	834	C	ASN	296	-8.857	-22.147	26.956	1.00	15.02	A	C
ATOM	835	O	ASN	296	-8.759	-23.086	27.723	1.00	14.34	A	O

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ATOM	836	N	LEU	297	-8.319	-20.958	27.212	1.00	14.74	A	N
ATOM	837	CA	LEU	297	-7.499	-20.687	28.397	1.00	14.50	A	C
ATOM	838	CB	LEU	297	-6.473	-19.601	28.042	1.00	13.23	A	C
ATOM	839	CG	LEU	297	-5.524	-18.980	29.075	1.00	13.37	A	C
ATOM	840	CD1	LEU	297	-4.548	-20.013	29.586	1.00	12.98	A	C
ATOM	841	CD2	LEU	297	-4.766	-17.811	28.448	1.00	11.90	A	C
ATOM	842	C	LEU	297	-8.294	-20.272	29.640	1.00	14.89	A	C
ATOM	843	O	LEU	297	-7.846	-20.457	30.773	1.00	14.19	A	O
ATOM	844	N	SER	298	-9.494	-19.747	29.412	1.00	17.10	A	N
ATOM	845	CA	SER	298	-10.380	-19.258	30.477	1.00	16.58	A	C
ATOM	846	CB	SER	298	-11.374	-18.258	29.890	1.00	16.40	A	C
ATOM	847	OG	SER	298	-10.822	-17.632	28.740	1.00	16.26	A	O
ATOM	848	C	SER	298	-11.119	-20.366	31.219	1.00	15.80	A	C
ATOM	849	O	SER	298	-11.761	-20.129	32.233	1.00	14.79	A	O
ATOM	850	N	LYS	299	-11.033	-21.576	30.697	1.00	16.91	A	N
ATOM	851	CA	LYS	299	-11.666	-22.724	31.320	1.00	18.90	A	C
ATOM	852	CB	LYS	299	-12.257	-23.619	30.233	1.00	20.20	A	C
ATOM	853	CG	LYS	299	-13.675	-24.096	30.459	1.00	21.74	A	C
ATOM	854	CD	LYS	299	-14.689	-22.996	30.269	1.00	23.41	A	C
ATOM	855	CE	LYS	299	-16.113	-23.571	30.273	1.00	24.55	A	C
ATOM	856	NZ	LYS	299	-16.466	-24.236	28.985	1.00	22.72	A	N
ATOM	857	C	LYS	299	-10.567	-23.460	32.114	1.00	19.35	A	C
ATOM	858	O	LYS	299	-10.824	-24.444	32.815	1.00	18.91	A	O
ATOM	859	N	CYS	300	-9.335	-22.976	31.972	1.00	20.56	A	N
ATOM	860	CA	CYS	300	-8.193	-23.536	32.678	1.00	21.90	A	C
ATOM	861	CB	CYS	300	-6.896	-23.244	31.934	1.00	23.67	A	C
ATOM	862	SG	CYS	300	-6.776	-23.975	30.317	1.00	26.49	A	S
ATOM	863	C	CYS	300	-8.126	-22.873	34.041	1.00	21.99	A	C
ATOM	864	O	CYS	300	-8.358	-21.669	34.158	1.00	21.47	A	O
ATOM	865	N	ASP	301	-7.703	-23.640	35.040	1.00	21.57	A	N
ATOM	866	CA	ASP	301	-7.607	-23.166	36.416	1.00	21.74	A	C
ATOM	867	CB	ASP	301	-8.706	-23.852	37.225	1.00	23.57	A	C
ATOM	868	CG	ASP	301	-8.815	-23.351	38.645	1.00	25.22	A	C
ATOM	869	OD1	ASP	301	-8.111	-22.391	39.030	1.00	26.89	A	O
ATOM	870	OD2	ASP	301	-9.641	-23.942	39.379	1.00	27.47	A	O
ATOM	871	C	ASP	301	-6.225	-23.472	37.002	1.00	21.18	A	C
ATOM	872	O	ASP	301	-5.968	-24.593	37.442	1.00	22.36	A	O
ATOM	873	N	PHE	302	-5.361	-22.456	37.036	1.00	20.14	A	N
ATOM	874	CA	PHE	302	-3.996	-22.592	37.543	1.00	18.42	A	C
ATOM	875	CB	PHE	302	-3.034	-21.720	36.724	1.00	14.29	A	C
ATOM	876	CG	PHE	302	-3.025	-22.022	35.248	1.00	13.95	A	C
ATOM	877	CD1	PHE	302	-2.142	-22.959	34.716	1.00	13.67	A	C
ATOM	878	CD2	PHE	302	-3.883	-21.359	34.381	1.00	11.22	A	C
ATOM	879	CE1	PHE	302	-2.130	-23.218	33.336	1.00	12.12	A	C
ATOM	880	CE2	PHE	302	-3.868	-21.616	33.021	1.00	8.83	A	C
ATOM	881	CZ	PHE	302	-3.000	-22.537	32.499	1.00	9.20	A	C
ATOM	882	O	PHE	302	-3.831	-22.211	39.014	1.00	20.01	A	C
ATOM	883	O	PHE	302	-2.705	-22.159	39.501	1.00	21.20	A	O
ATOM	884	N	THR	303	-4.924	-21.959	39.732	1.00	20.70	A	N
ATOM	885	CA	THR	303	-4.809	-21.553	41.136	1.00	21.34	A	C
ATOM	886	CB	THR	303	-6.173	-21.127	41.754	1.00	22.04	A	C
ATOM	887	OG1	THR	303	-7.193	-22.066	41.400	1.00	22.88	A	O
ATOM	888	CG2	THR	303	-6.569	-19.740	41.267	1.00	20.70	A	C
ATOM	889	C	THR	303	-4.041	-22.481	42.088	1.00	21.48	A	C
ATOM	890	O	THR	303	-3.351	-22.001	42.992	1.00	21.25	A	O
ATOM	891	N	GLN	304	-4.134	-23.796	41.903	1.00	22.25	A	N
ATOM	892	CA	GLN	304	-3.379	-24.692	42.782	1.00	23.29	A	C
ATOM	893	CB	GLN	304	-3.820	-26.149	42.636	1.00	22.64	A	C
ATOM	894	CG	GLN	304	-4.641	-26.662	43.810	1.00	24.16	A	C
ATOM	895	CD	GLN	304	-4.916	-28.162	43.734	1.00	26.42	A	C
ATOM	896	OE1	GLN	304	-3.994	-28.979	43.807	1.00	27.31	A	O
ATOM	897	NE2	GLN	304	-6.190	-28.529	43.599	1.00	26.70	A	N
ATOM	898	C	GLN	304	-1.889	-24.547	42.473	1.00	24.58	A	C



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ATOM	962	CB	GLN	312	8.624	-23.394	45.773	1.00	39.25	A	C
ATOM	963	CG	GLN	312	7.911	-24.677	45.374	1.00	41.93	A	C
ATOM	964	CD	GLN	312	8.470	-25.919	46.057	1.00	43.92	A	C
ATOM	965	OE1	GLN	312	9.356	-26.581	45.522	1.00	44.78	A	O
ATOM	966	NE2	GLN	312	7.929	-26.257	47.429	1.00	45.18	A	N
ATOM	967	C	GLN	312	9.265	-21.697	47.480	1.00	41.47	A	C
ATOM	968	O	GLN	312	10.463	-21.846	47.718	1.00	42.95	A	O
ATOM	969	N	THR	313	8.684	-20.498	47.420	1.00	43.74	A	N
ATOM	970	CA	THR	313	9.435	-19.266	47.652	1.00	45.58	A	C
ATOM	971	CB	THR	313	8.777	-18.036	46.946	1.00	45.05	A	C
ATOM	972	OG1	THR	313	8.738	-18.254	45.529	1.00	44.58	A	O
ATOM	973	CG2	THR	313	9.583	-16.773	47.194	1.00	44.38	A	C
ATOM	974	C	THR	313	9.632	-19.000	49.143	1.00	47.70	A	C
ATOM	975	O	THR	313	10.646	-18.423	49.540	1.00	48.65	A	O
ATOM	976	N	GLU	314	8.667	-19.416	49.964	1.00	50.10	A	N
ATOM	977	CA	GLU	314	8.761	-19.240	51.415	1.00	52.16	A	C
ATOM	978	CB	GLU	314	7.386	-19.332	52.077	1.00	52.69	A	C
ATOM	979	CG	GLU	314	6.500	-18.124	51.822	1.00	55.56	A	C
ATOM	980	CD	GLU	314	5.164	-18.208	52.547	1.00	57.04	A	C
ATOM	981	OE1	GLU	314	4.840	-17.272	53.317	1.00	56.91	A	O
ATOM	982	OE2	GLU	314	4.440	-19.208	52.345	1.00	57.77	A	O
ATOM	983	C	GLU	314	9.694	-20.287	52.007	1.00	53.42	A	C
ATOM	984	O	GLU	314	10.516	-19.981	52.865	1.00	54.64	A	O
ATOM	985	N	ALA	315	9.585	-21.519	51.527	1.00	54.46	A	N
ATOM	986	CA	ALA	315	10.442	-22.588	52.011	1.00	56.37	A	C
ATOM	987	CB	ALA	315	9.972	-23.917	51.461	1.00	57.03	A	C
ATOM	988	C	ALA	315	11.890	-22.327	51.600	1.00	57.82	A	C
ATOM	989	O	ALA	315	12.826	-22.775	52.266	1.00	58.79	A	O
ATOM	990	N	ARG	316	12.074	-21.597	50.506	1.00	59.16	A	N
ATOM	991	CA	ARG	316	13.417	-21.291	50.029	1.00	61.11	A	C
ATOM	992	CB	ARG	316	13.399	-20.886	48.549	1.00	61.68	A	C
ATOM	993	CG	ARG	316	14.667	-21.277	47.787	1.00	62.94	A	C
ATOM	994	CD	ARG	316	14.644	-20.812	46.333	1.00	63.68	A	C
ATOM	995	NE	ARG	316	13.475	-21.306	45.609	1.00	64.65	A	N
ATOM	996	CZ	ARG	316	13.016	-20.787	44.472	1.00	65.34	A	C
ATOM	997	NH1	ARG	316	11.939	-21.309	43.900	1.00	65.71	A	N
ATOM	998	NH2	ARG	316	13.629	-19.754	43.900	1.00	64.12	A	N
ATOM	999	C	ARG	316	14.064	-20.201	50.880	1.00	61.86	A	C
ATOM	1000	O	ARG	316	15.247	-20.290	51.208	1.00	61.69	A	O
ATOM	1001	N	LYS	317	13.288	-19.191	51.266	1.00	63.58	A	N
ATOM	1002	CA	LYS	317	13.829	-18.114	52.089	1.00	66.26	A	C
ATOM	1003	CB	LYS	317	13.035	-16.808	51.909	1.00	66.79	A	C
ATOM	1004	CG	LYS	317	11.663	-16.766	52.567	1.00	68.17	A	C
ATOM	1005	CD	LYS	317	11.133	-15.333	52.618	1.00	68.30	A	C
ATOM	1006	CE	LYS	317	9.806	-15.243	53.353	1.00	67.50	A	C
ATOM	1007	NZ	LYS	317	9.399	-13.824	53.530	1.00	66.01	A	N
ATOM	1008	C	LYS	317	13.914	-18.523	53.565	1.00	67.22	A	C
ATOM	1009	O	LYS	317	15.907	-17.679	54.467	1.00	67.61	A	O
ATOM	1010	N	GLN	318	14.030	-19.831	53.789	1.00	68.43	A	N
ATOM	1011	CA	GLN	318	14.129	-20.404	55.129	1.00	69.07	A	C
ATOM	1012	CB	GLN	318	12.731	-20.712	55.686	1.00	68.09	A	C
ATOM	1013	CG	GLN	318	11.910	-19.472	56.054	1.00	67.04	A	C
ATOM	1014	CD	GLN	318	10.416	-19.752	56.182	1.00	66.96	A	C
ATOM	1015	OE1	GLN	318	9.607	-18.828	56.318	1.00	65.18	A	O
ATOM	1016	NE2	GLN	318	10.043	-21.029	56.122	1.00	67.21	A	N
ATOM	1017	C	GLN	318	14.993	-21.668	55.113	1.00	70.06	A	C
ATOM	1018	O	GLN	318	14.718	-22.624	55.835	1.00	69.42	A	O
ATOM	1019	N	MET	319	16.024	-21.665	54.267	1.00	72.15	A	N
ATOM	1020	CA	MET	319	16.960	-22.786	54.155	1.00	74.03	A	C
ATOM	1021	CB	MET	319	17.499	-22.917	52.722	1.00	75.26	A	C
ATOM	1022	CG	MET	319	16.511	-23.507	51.716	1.00	77.66	A	C
ATOM	1023	SD	MET	319	17.218	-23.714	50.042	1.00	81.53	A	S
ATOM	1024	CE	MET	319	17.238	-25.527	49.846	1.00	79.15	A	C

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ATOM	1025	C	MET	319	18.121	-22.624	55.144	1.00	74.53	A	C
ATOM	1026	O	MET	319	18.443	-21.513	55.568	1.00	73.54	A	O
ATOM	1027	N	SER	320	18.756	-23.743	55.482	1.00	76.04	A	N
ATOM	1028	CA	SER	320	19.865	-23.778	56.436	1.00	77.76	A	C
ATOM	1029	CB	SER	320	20.058	-25.214	56.940	1.00	78.08	A	C
ATOM	1030	OG	SER	320	20.310	-26.103	55.864	1.00	78.17	A	O
ATOM	1031	C	SER	320	21.205	-23.212	55.938	1.00	78.84	A	C
ATOM	1032	O	SER	320	21.238	-22.207	55.229	1.00	78.57	A	O
ATOM	1033	N	LYS	321	22.302	-23.825	56.394	1.00	80.23	A	N
ATOM	1034	CA	LYS	321	23.666	-23.431	56.025	1.00	80.75	A	C
ATOM	1035	CB	LYS	321	24.620	-23.541	57.225	1.00	81.21	A	C
ATOM	1036	CG	LYS	321	24.262	-22.682	58.426	1.00	81.78	A	C
ATOM	1037	CD	LYS	321	25.087	-23.089	59.640	1.00	81.81	A	C
ATOM	1038	CE	LYS	321	24.592	-22.403	60.904	1.00	81.97	A	C
ATOM	1039	NZ	LYS	321	25.306	-22.903	62.108	1.00	81.52	A	N
ATOM	1040	C	LYS	321	24.176	-24.352	54.925	1.00	80.82	A	C
ATOM	1041	O	LYS	321	24.850	-23.905	54.000	1.00	80.87	A	O
ATOM	1042	N	GLU	322	23.882	-25.645	55.056	1.00	80.95	A	N
ATOM	1043	CA	GLU	322	24.307	-26.642	54.073	1.00	81.04	A	C
ATOM	1044	CB	GLU	322	23.994	-28.063	54.556	1.00	81.72	A	C
ATOM	1045	CG	GLU	322	24.412	-29.149	53.557	1.00	82.22	A	C
ATOM	1046	CD	GLU	322	23.800	-30.515	53.838	1.00	82.50	A	C
ATOM	1047	OE1	GLU	322	24.217	-31.483	53.164	1.00	82.13	A	O
ATOM	1048	OE2	GLU	322	22.907	-30.624	54.713	1.00	82.72	A	O
ATOM	1049	C	GLU	322	23.617	-26.410	52.734	1.00	80.48	A	C
ATOM	1050	O	GLU	322	24.130	-26.799	51.691	1.00	80.40	A	O
ATOM	1051	N	GLU	323	22.429	-25.819	52.775	1.00	79.45	A	N
ATOM	1052	CA	GLU	323	21.694	-25.545	51.555	1.00	78.23	A	C
ATOM	1053	CB	GLU	323	20.193	-25.492	51.844	1.00	78.44	A	C
ATOM	1054	CG	GLU	323	19.634	-26.764	52.484	1.00	79.28	A	C
ATOM	1055	CD	GLU	323	19.787	-28.006	51.609	1.00	79.81	A	C
ATOM	1056	OE1	GLU	323	18.811	-28.373	50.916	1.00	80.14	A	O
ATOM	1057	OE2	GLU	323	20.874	-28.627	51.628	1.00	79.45	A	O
ATOM	1058	C	GLU	323	22.191	-24.233	50.953	1.00	77.43	A	C
ATOM	1059	O	GLU	323	22.716	-24.221	49.833	1.00	77.11	A	O
ATOM	1060	N	LYS	324	22.093	-23.154	51.732	1.00	75.87	A	N
ATOM	1061	CA	LYS	324	22.522	-21.827	51.296	1.00	74.53	A	C
ATOM	1062	CB	LYS	324	22.258	-20.782	52.381	1.00	73.93	A	C
ATOM	1063	CG	LYS	324	20.796	-20.632	52.773	1.00	74.32	A	C
ATOM	1064	CD	LYS	324	19.915	-20.208	51.606	1.00	74.57	A	C
ATOM	1065	CE	LYS	324	20.036	-18.722	51.309	1.00	74.67	A	C
ATOM	1066	NZ	LYS	324	19.183	-18.345	50.150	1.00	73.57	A	N
ATOM	1067	C	LYS	324	23.988	-21.774	50.891	1.00	74.69	A	C
ATOM	1068	O	LYS	324	24.302	-21.411	49.761	1.00	74.94	A	O
ATOM	1069	N	LEU	325	24.881	-22.151	51.805	1.00	74.82	A	N
ATOM	1070	CA	LEU	325	26.320	-22.128	51.537	1.00	74.55	A	C
ATOM	1071	CB	LEU	325	27.122	-22.387	52.821	1.00	74.68	A	C
ATOM	1072	CG	LEU	325	28.650	-22.248	52.732	1.00	75.12	A	C
ATOM	1073	CD1	LEU	325	29.037	-20.812	52.389	1.00	75.15	A	C
ATOM	1074	CD2	LEU	325	29.287	-22.666	54.045	1.00	74.73	A	C
ATOM	1075	C	LEU	325	26.766	-23.094	50.437	1.00	74.28	A	C
ATOM	1076	O	LEU	325	27.617	-22.747	49.618	1.00	74.25	A	O
ATOM	1077	N	LYS	326	26.202	-24.300	50.417	1.00	73.92	A	N
ATOM	1078	CA	LYS	326	26.568	-25.286	49.402	1.00	73.61	A	C
ATOM	1079	CB	LYS	326	25.921	-26.641	49.696	1.00	73.55	A	C
ATOM	1080	CG	LYS	326	26.143	-27.722	48.651	1.00	72.48	A	C
ATOM	1081	CD	LYS	326	25.549	-29.046	49.122	1.00	71.91	A	C
ATOM	1082	CE	LYS	326	25.681	-30.144	48.072	1.00	71.26	A	C
ATOM	1083	NZ	LYS	326	24.865	-29.873	46.856	1.00	70.94	A	N
ATOM	1084	C	LYS	326	26.169	-24.804	48.021	1.00	73.43	A	C
ATOM	1085	O	LYS	326	26.989	-24.821	47.103	1.00	73.50	A	O
ATOM	1086	N	ILE	327	24.927	-24.330	47.894	1.00	73.33	A	N
ATOM	1087	CA	ILE	327	24.416	-23.835	46.614	1.00	72.60	A	C

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ATOM	1088	CB	ILE	327	22.873	-23.670	46.627	1.00	72.05	A	C
ATOM	1089	CG2	ILE	327	22.479	-22.315	47.188	1.00	71.19	A	C
ATOM	1090	CG1	ILE	327	22.324	-23.830	45.206	1.00	72.37	A	C
ATOM	1091	CD1	ILE	327	20.819	-24.003	45.139	1.00	72.18	A	C
ATOM	1092	C	ILE	327	25.106	-22.542	46.161	1.00	72.25	A	C
ATOM	1093	O	ILE	327	25.208	-22.281	44.963	1.00	72.71	A	O
ATOM	1094	N	LYS	328	25.577	-21.741	47.115	1.00	71.71	A	N
ATOM	1095	CA	LYS	328	26.288	-20.504	46.797	1.00	71.30	A	C
ATOM	1096	CB	LYS	328	26.336	-19.566	48.010	1.00	72.03	A	C
ATOM	1097	CG	LYS	328	25.343	-18.394	47.993	1.00	73.22	A	C
ATOM	1098	CD	LYS	328	23.894	-18.820	48.259	1.00	73.60	A	C
ATOM	1099	CE	LYS	328	22.981	-17.600	48.428	1.00	73.46	A	C
ATOM	1100	NZ	LYS	328	21.542	-17.944	48.614	1.00	72.37	A	N
ATOM	1101	C	LYS	328	27.717	-20.844	46.367	1.00	70.74	A	C
ATOM	1102	O	LYS	328	28.385	-20.036	45.716	1.00	70.57	A	O
ATOM	1103	N	GLU	329	28.182	-22.036	46.749	1.00	70.09	A	N
ATOM	1104	CA	GLU	329	29.530	-22.491	46.410	1.00	68.78	A	C
ATOM	1105	CB	GLU	329	30.193	-23.192	47.597	1.00	70.08	A	C
ATOM	1106	CG	GLU	329	30.601	-22.202	48.694	1.00	71.96	A	C
ATOM	1107	CD	GLU	329	31.478	-22.800	49.784	1.00	73.11	A	C
ATOM	1108	OE1	GLU	329	31.844	-23.995	49.699	1.00	74.20	A	O
ATOM	1109	OE2	GLU	329	31.809	-22.053	50.730	1.00	73.06	A	O
ATOM	1110	C	GLU	329	29.602	-23.341	45.149	1.00	67.02	A	C
ATOM	1111	O	GLU	329	30.645	-23.389	44.500	1.00	67.46	A	O
ATOM	1112	N	GLU	330	28.504	-24.012	44.804	1.00	64.49	A	N
ATOM	1113	CA	GLU	330	28.459	-24.810	43.578	1.00	61.50	A	C
ATOM	1114	CB	GLU	330	27.283	-25.790	43.581	1.00	61.43	A	C
ATOM	1115	CG	GLU	330	27.488	-27.012	44.474	1.00	61.79	A	C
ATOM	1116	CD	GLU	330	26.332	-28.001	44.403	1.00	61.96	A	C
ATOM	1117	OE1	GLU	330	26.597	-29.222	44.323	1.00	61.92	A	O
ATOM	1118	OE2	GLU	330	25.161	-27.562	44.434	1.00	61.78	A	O
ATOM	1119	C	GLU	330	28.330	-23.844	42.407	1.00	59.53	A	C
ATOM	1120	O	GLU	330	28.588	-24.202	41.260	1.00	59.98	A	O
ATOM	1121	N	ASN	331	27.913	-22.618	42.708	1.00	57.07	A	N
ATOM	1122	CA	ASN	331	27.776	-21.579	41.698	1.00	54.77	A	C
ATOM	1123	CB	ASN	331	26.946	-20.413	42.227	1.00	53.91	A	C
ATOM	1124	CG	ASN	331	25.539	-20.406	41.680	1.00	52.80	A	C
ATOM	1125	OD1	ASN	331	24.723	-19.572	42.067	1.00	52.12	A	O
ATOM	1126	ND2	ASN	331	25.247	-21.330	40.767	1.00	51.71	A	N
ATOM	1127	C	ASN	331	29.150	-21.074	41.303	1.00	53.92	A	C
ATOM	1128	O	ASN	331	29.470	-21.006	40.122	1.00	54.12	A	O
ATOM	1129	N	GLU	332	29.956	-20.722	42.303	1.00	53.56	A	N
ATOM	1130	CA	GLU	332	31.314	-20.228	42.082	1.00	52.75	A	C
ATOM	1131	CB	GLU	332	31.892	-19.677	43.386	1.00	54.63	A	C
ATOM	1132	CG	GLU	332	31.193	-18.412	43.865	1.00	56.38	A	C
ATOM	1133	CD	GLU	332	31.419	-18.136	45.335	1.00	57.52	A	C
ATOM	1134	OE1	GLU	332	30.419	-17.908	46.049	1.00	58.59	A	O
ATOM	1135	OE2	GLU	332	32.586	-18.149	45.778	1.00	58.20	A	O
ATOM	1136	C	GLU	332	32.223	-21.305	41.484	1.00	51.41	A	C
ATOM	1137	O	GLU	332	33.348	-21.021	41.074	1.00	50.65	A	O
ATOM	1138	N	LYS	333	31.733	-22.544	41.463	1.00	50.18	A	N
ATOM	1139	CA	LYS	333	32.456	-23.666	40.868	1.00	49.23	A	C
ATOM	1140	CB	LYS	333	31.974	-24.982	41.476	1.00	51.17	A	C
ATOM	1141	CG	LYS	333	32.372	-26.226	40.682	1.00	54.87	A	C
ATOM	1142	CD	LYS	333	31.351	-27.346	40.877	1.00	57.13	A	C
ATOM	1143	CE	LYS	333	31.552	-28.492	39.885	1.00	57.58	A	C
ATOM	1144	NZ	LYS	333	30.380	-29.428	39.880	1.00	57.96	A	N
ATOM	1145	C	LYS	333	32.135	-23.642	39.368	1.00	47.31	A	C
ATOM	1146	O	LYS	333	32.926	-24.092	38.534	1.00	47.70	A	O
ATOM	1147	N	LEU	334	30.962	-23.100	39.049	1.00	44.62	A	N
ATOM	1148	CA	LEU	334	30.470	-22.972	37.681	1.00	42.00	A	C
ATOM	1149	CB	LEU	334	28.934	-22.913	37.716	1.00	41.48	A	C
ATOM	1150	CG	LEU	334	28.070	-23.430	36.561	1.00	41.06	A	C



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ATOM	1151	CD1	LEU	334	28.398	-24.880	36.240	1.00	40.19	A	C
ATOM	1152	CD2	LEU	334	26.613	-23.311	36.959	1.00	40.70	A	C
ATOM	1153	C	LEU	334	31.052	-21.699	37.043	1.00	40.33	A	C
ATOM	1154	O	LEU	334	31.390	-21.676	35.855	1.00	39.07	A	O
ATOM	1155	N	LEU	335	31.190	-20.660	37.865	1.00	38.76	A	N
ATOM	1156	CA	LEU	335	31.722	-19.363	37.454	1.00	37.61	A	C
ATOM	1157	CB	LEU	335	31.610	-18.372	38.627	1.00	37.14	A	C
ATOM	1158	CG	LEU	335	32.274	-16.984	38.675	1.00	36.59	A	C
ATOM	1159	CD1	LEU	335	33.738	-17.087	39.090	1.00	37.80	A	C
ATOM	1160	CD2	LEU	335	32.112	-16.240	37.357	1.00	36.02	A	C
ATOM	1161	C	LEU	335	33.164	-19.474	36.989	1.00	37.41	A	C
ATOM	1162	O	LEU	335	33.623	-18.677	36.175	1.00	36.88	A	O
ATOM	1163	N	LYS	336	33.876	-20.458	37.530	1.00	38.05	A	N
ATOM	1164	CA	LYS	336	35.274	-20.685	37.193	1.00	37.97	A	C
ATOM	1165	CB	LYS	336	36.044	-21.133	38.438	1.00	40.25	A	C
ATOM	1166	CG	LYS	336	36.139	-20.016	39.491	1.00	43.32	A	C
ATOM	1167	CD	LYS	336	36.469	-20.535	40.879	1.00	45.50	A	C
ATOM	1168	CE	LYS	336	36.131	-19.484	41.931	1.00	47.08	A	C
ATOM	1169	NZ	LYS	336	35.998	-20.062	43.304	1.00	48.04	A	N
ATOM	1170	C	LYS	336	35.438	-21.673	36.048	1.00	36.62	A	C
ATOM	1171	O	LYS	336	36.132	-21.391	35.073	1.00	37.11	A	O
ATOM	1172	N	GLU	337	34.761	-22.809	36.134	1.00	34.35	A	N
ATOM	1173	CA	GLU	337	34.858	-23.798	35.077	1.00	32.66	A	C
ATOM	1174	CB	GLU	337	34.240	-25.123	35.537	1.00	35.84	A	C
ATOM	1175	CG	GLU	337	35.135	-26.365	35.329	1.00	41.92	A	C
ATOM	1176	CD	GLU	337	36.336	-26.442	36.295	1.00	45.08	A	C
ATOM	1177	OE1	GLU	337	37.448	-25.992	35.931	1.00	45.83	A	O
ATOM	1178	OE2	GLU	337	36.169	-26.975	37.416	1.00	46.82	A	O
ATOM	1179	C	GLU	337	34.209	-23.332	33.763	1.00	29.96	A	C
ATOM	1180	O	GLU	337	34.615	-23.777	32.691	1.00	29.62	A	O
ATOM	1181	N	TYR	338	33.238	-22.417	33.837	1.00	27.09	A	N
ATOM	1182	CA	TYR	338	32.529	-21.933	32.641	1.00	24.86	A	C
ATOM	1183	CB	TYR	338	31.073	-22.432	32.658	1.00	24.71	A	C
ATOM	1184	CG	TYR	338	30.934	-23.922	32.451	1.00	25.82	A	C
ATOM	1185	CD1	TYR	338	30.832	-24.456	31.173	1.00	26.60	A	C
ATOM	1186	CE1	TYR	338	30.794	-25.826	30.962	1.00	26.81	A	C
ATOM	1187	CD2	TYR	338	30.982	-24.803	33.524	1.00	27.70	A	C
ATOM	1188	CE2	TYR	338	30.946	-26.184	33.328	1.00	27.89	A	C
ATOM	1189	CZ	TYR	338	30.854	-26.689	32.040	1.00	28.13	A	C
ATOM	1190	OH	TYR	338	30.846	-28.056	31.823	1.00	29.10	A	O
ATOM	1191	C	TYR	338	32.544	-20.415	32.386	1.00	22.86	A	C
ATOM	1192	O	TYR	338	32.272	-19.956	31.268	1.00	21.40	A	O
ATOM	1193	N	GLY	339	32.874	-19.646	33.417	1.00	21.06	A	N
ATOM	1194	CA	GLY	339	32.896	-18.199	33.290	1.00	17.46	A	C
ATOM	1195	C	GLY	339	34.100	-17.533	32.660	1.00	15.36	A	C
ATOM	1196	O	GLY	339	34.084	-16.328	32.478	1.00	15.58	A	O
ATOM	1197	N	PHE	340	35.137	-18.287	32.330	1.00	13.57	A	N
ATOM	1198	CA	PHE	340	36.324	-17.700	31.734	1.00	13.16	A	C
ATOM	1199	CB	PHE	340	37.550	-17.954	32.617	1.00	13.71	A	C
ATOM	1200	CG	PHE	340	37.539	-17.188	33.920	1.00	15.09	A	C
ATOM	1201	CD1	PHE	340	36.716	-17.580	34.971	1.00	14.49	A	C
ATOM	1202	CD2	PHE	340	38.339	-16.066	34.087	1.00	15.79	A	C
ATOM	1203	CE1	PHE	340	36.688	-16.871	36.160	1.00	15.15	A	C
ATOM	1204	CE2	PHE	340	38.318	-15.351	35.271	1.00	17.70	A	C
ATOM	1205	CZ	PHE	340	37.487	-15.757	36.311	1.00	17.25	A	C
ATOM	1206	C	PHE	340	36.562	-18.283	30.363	1.00	13.70	A	C
ATOM	1207	O	PHE	340	35.953	-19.276	29.994	1.00	16.41	A	O
ATOM	1208	N	CYS	341	37.474	-17.681	29.618	1.00	13.99	A	N
ATOM	1209	CA	CYS	341	37.811	-18.150	28.282	1.00	14.79	A	C
ATOM	1210	CB	CYS	341	36.876	-17.498	27.254	1.00	15.58	A	C
ATOM	1211	SG	CYS	341	37.623	-16.517	25.899	1.00	18.22	A	S
ATOM	1212	C	CYS	341	39.265	-17.762	28.034	1.00	15.37	A	C
ATOM	1213	O	CYS	341	39.856	-17.029	28.833	1.00	16.05	A	O

ATOM	1214	N	ILE	342	39.885	-18.314	26.996	1.00	14.63	A	N
ATOM	1215	CA	ILE	342	41.263	-17.939	26.717	1.00	13.35	A	C
ATOM	1216	CB	ILE	342	42.252	-19.144	26.714	1.00	11.83	A	C
ATOM	1217	CG2	ILE	342	43.639	-18.656	26.371	1.00	8.92	A	C
ATOM	1218	CG1	ILE	342	42.277	-19.861	28.071	1.00	10.84	A	C
ATOM	1219	CD1	ILE	342	42.652	-18.986	29.247	1.00	10.51	A	C
ATOM	1220	C	ILE	342	41.306	-17.275	25.359	1.00	14.86	A	C
ATOM	1221	O	ILE	342	41.061	-17.916	24.337	1.00	15.90	A	O
ATOM	1222	N	MET	343	41.541	-15.969	25.358	1.00	15.41	A	N
ATOM	1223	CA	MET	343	41.652	-15.230	24.112	1.00	15.89	A	C
ATOM	1224	CB	MET	343	40.558	-14.180	23.975	1.00	15.58	A	C
ATOM	1225	CG	MET	343	40.669	-13.407	22.686	1.00	16.22	A	C
ATOM	1226	SD	MET	343	39.478	-12.110	22.551	1.00	19.93	A	S
ATOM	1227	CE	MET	343	38.282	-12.879	21.454	1.00	19.63	A	C
ATOM	1228	C	MET	343	43.014	-14.557	24.060	1.00	17.23	A	C
ATOM	1229	O	MET	343	43.336	-13.721	24.905	1.00	18.87	A	O
ATOM	1230	N	ASP	344	43.816	-14.963	23.084	1.00	17.23	A	N
ATOM	1231	CA	ASP	344	45.139	-14.419	22.870	1.00	17.35	A	C
ATOM	1232	CB	ASP	344	45.042	-13.129	22.072	1.00	18.57	A	C
ATOM	1233	CG	ASP	344	44.786	-13.377	20.630	1.00	20.04	A	C
ATOM	1234	OD1	ASP	344	45.147	-14.475	20.175	1.00	19.82	A	O
ATOM	1235	OD2	ASP	344	44.239	-12.482	19.953	1.00	20.82	A	O
ATOM	1236	C	ASP	344	46.026	-14.180	24.076	1.00	18.19	A	C
ATOM	1237	O	ASP	344	46.026	-13.080	24.661	1.00	20.99	A	O
ATOM	1238	N	ASN	345	46.789	-15.200	24.447	1.00	14.93	A	N
ATOM	1239	CA	ASN	345	47.737	-15.079	25.546	1.00	11.94	A	C
ATOM	1240	CB	ASN	345	48.818	-14.044	25.182	1.00	10.90	A	C
ATOM	1241	CG	ASN	345	49.432	-14.292	23.795	1.00	11.59	A	C
ATOM	1242	OD1	ASN	345	49.146	-13.570	22.834	1.00	10.13	A	O
ATOM	1243	ND2	ASN	345	50.277	-15.320	23.691	1.00	11.84	A	N
ATOM	1244	C	ASN	345	47.183	-14.802	26.947	1.00	11.23	A	C
ATOM	1245	O	ASN	345	47.905	-14.949	27.921	1.00	12.84	A	O
ATOM	1246	N	HIS	346	45.916	-14.430	27.076	1.00	9.09	A	N
ATOM	1247	CA	HIS	346	45.375	-14.180	28.406	1.00	8.62	A	C
ATOM	1248	CB	HIS	346	45.252	-12.690	28.666	1.00	9.86	A	C
ATOM	1249	CG	HIS	346	46.544	-11.947	28.575	1.00	9.39	A	C
ATOM	1250	CD2	HIS	346	47.227	-11.477	27.505	1.00	9.40	A	C
ATOM	1251	ND1	HIS	346	47.268	-11.581	29.690	1.00	8.48	A	N
ATOM	1252	CE1	HIS	346	48.343	-10.918	29.309	1.00	9.08	A	C
ATOM	1253	NE2	HIS	346	48.342	-10.839	27.988	1.00	9.29	A	N
ATOM	1254	C	HIS	346	44.037	-14.827	28.704	1.00	8.61	A	C
ATOM	1255	O	HIS	346	43.290	-15.178	27.810	1.00	9.18	A	O
ATOM	1256	N	LYS	347	43.751	-14.957	29.992	1.00	10.44	A	N
ATOM	1257	CA	LYS	347	42.515	-15.534	30.498	1.00	13.13	A	C
ATOM	1258	CB	LYS	347	42.818	-16.328	31.782	1.00	14.65	A	C
ATOM	1259	CG	LYS	347	41.602	-16.772	32.610	1.00	17.60	A	C
ATOM	1260	CD	LYS	347	41.971	-17.620	33.844	1.00	17.50	A	C
ATOM	1261	CE	LYS	347	42.680	-18.920	33.439	1.00	21.38	A	C
ATOM	1262	NZ	LYS	347	42.614	-20.042	34.454	1.00	20.71	A	N
ATOM	1263	C	LYS	347	41.572	-14.368	30.788	1.00	14.39	A	C
ATOM	1264	O	LYS	347	41.864	-13.529	31.626	1.00	16.26	A	O
ATOM	1265	N	GLU	348	40.452	-14.300	30.081	1.00	16.95	A	N
ATOM	1266	CA	GLU	348	39.497	-13.212	30.280	1.00	18.64	A	C
ATOM	1267	CB	GLU	348	39.444	-12.333	29.026	1.00	22.43	A	C
ATOM	1268	CG	GLU	348	40.823	-11.786	28.592	1.00	27.97	A	C
ATOM	1269	CD	GLU	348	40.828	-10.272	28.343	1.00	30.34	A	C
ATOM	1270	OE1	GLU	348	40.634	-9.864	27.174	1.00	31.53	A	O
ATOM	1271	OE2	GLU	348	41.034	-9.497	29.312	1.00	31.45	A	O
ATOM	1272	C	GLU	348	38.101	-13.713	30.648	1.00	17.47	A	C
ATOM	1273	O	GLU	348	37.722	-14.827	30.314	1.00	17.82	A	O
ATOM	1274	N	ARG	349	37.331	-12.882	31.336	1.00	17.00	A	N
ATOM	1275	CA	ARG	349	35.994	-13.274	31.752	1.00	16.44	A	C
ATOM	1276	CB	ARG	349	35.555	-12.472	32.971	1.00	21.19	A	C

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ATOM	1277	CG	ARG	349	35.852	-13.122	34.295	1.00	27.07	A	C
ATOM	1278	CD	ARG	349	35.102	-12.410	35.417	1.00	34.38	A	C
ATOM	1279	NE	ARG	349	35.632	-12.752	36.738	1.00	40.04	A	N
ATOM	1280	CZ	ARG	349	36.650	-12.128	37.335	1.00	41.92	A	C
ATOM	1281	NH1	ARG	349	37.270	-11.105	36.748	1.00	41.70	A	N
ATOM	1282	NH2	ARG	349	37.080	-12.567	38.512	1.00	43.77	A	N
ATOM	1283	C	ARG	349	34.918	-13.163	30.687	1.00	14.28	A	C
ATOM	1284	O	ARG	349	34.946	-12.269	29.851	1.00	12.94	A	O
ATOM	1285	N	ILE	350	33.954	-14.077	30.763	1.00	12.65	A	N
ATOM	1286	CA	ILE	350	32.814	-14.128	29.856	1.00	11.97	A	C
ATOM	1287	CB	ILE	350	32.483	-15.564	29.461	1.00	10.27	A	C
ATOM	1288	CG2	ILE	350	31.245	-15.604	28.599	1.00	12.20	A	C
ATOM	1289	CG1	ILE	350	33.624	-16.192	28.697	1.00	9.46	A	C
ATOM	1290	CD1	ILE	350	33.399	-17.650	28.471	1.00	10.79	A	C
ATOM	1291	C	ILE	350	31.597	-13.581	30.600	1.00	12.33	A	C
ATOM	1292	O	ILE	350	31.444	-13.825	31.796	1.00	12.79	A	O
ATOM	1293	N	ALA	351	30.708	-12.894	29.885	1.00	12.38	A	N
ATOM	1294	CA	ALA	351	29.522	-12.324	30.507	1.00	13.18	A	C
ATOM	1295	CB	ALA	351	29.135	-11.034	29.824	1.00	14.59	A	C
ATOM	1296	C	ALA	351	28.298	-13.242	30.643	1.00	14.69	A	C
ATOM	1297	O	ALA	351	27.894	-13.573	31.759	1.00	17.30	A	O
ATOM	1298	N	ASN	352	27.721	-13.695	29.539	1.00	14.37	A	N
ATOM	1299	CA	ASN	352	26.517	-14.526	29.657	1.00	15.58	A	C
ATOM	1300	CB	ASN	352	25.363	-13.938	28.820	1.00	18.67	A	C
ATOM	1301	CG	ASN	352	24.343	-13.222	29.659	1.00	20.23	A	C
ATOM	1302	OD1	ASN	352	23.152	-13.573	29.661	1.00	20.75	A	O
ATOM	1303	ND2	ASN	352	24.790	-12.172	30.358	1.00	21.84	A	N
ATOM	1304	C	ASN	352	26.707	-15.997	29.282	1.00	16.21	A	C
ATOM	1305	O	ASN	352	26.074	-16.487	28.338	1.00	15.75	A	O
ATOM	1306	N	PHE	353	27.506	-16.726	30.064	1.00	16.07	A	N
ATOM	1307	CA	PHE	353	27.748	-18.148	29.782	1.00	13.78	A	C
ATOM	1308	CB	PHE	353	29.045	-18.644	30.447	1.00	12.57	A	C
ATOM	1309	CG	PHE	353	29.073	-18.499	31.942	1.00	10.82	A	C
ATOM	1310	CD1	PHE	353	28.703	-19.553	32.758	1.00	9.06	A	C
ATOM	1311	CD2	PHE	353	29.485	-17.315	32.531	1.00	10.56	A	C
ATOM	1312	CE1	PHE	353	28.740	-19.433	34.136	1.00	9.36	A	C
ATOM	1313	CE2	PHE	353	29.524	-17.189	33.916	1.00	11.61	A	C
ATOM	1314	CZ	PHE	353	29.150	-18.250	34.716	1.00	9.65	A	C
ATOM	1315	C	PHE	353	26.563	-19.057	30.118	1.00	12.40	A	C
ATOM	1316	O	PHE	353	26.501	-20.180	29.644	1.00	12.35	A	O
ATOM	1317	N	LYS	354	25.622	-18.553	30.913	1.00	12.48	A	N
ATOM	1318	CA	LYS	354	24.434	-19.299	31.302	1.00	12.11	A	C
ATOM	1319	CB	LYS	354	24.100	-19.024	32.768	1.00	13.32	A	C
ATOM	1320	CG	LYS	354	25.211	-19.385	33.715	1.00	16.31	A	C
ATOM	1321	CD	LYS	354	25.082	-18.654	35.029	1.00	19.27	A	C
ATOM	1322	CE	LYS	354	24.159	-19.364	35.980	1.00	20.64	A	C
ATOM	1323	NZ	LYS	354	24.498	-18.934	37.382	1.00	25.89	A	N
ATOM	1324	C	LYS	354	23.260	-18.878	30.441	1.00	11.81	A	C
ATOM	1325	O	LYS	354	22.709	-17.796	30.625	1.00	11.31	A	O
ATOM	1326	N	ILE	355	22.862	-19.749	29.522	1.00	11.36	A	N
ATOM	1327	CA	ILE	355	21.738	-19.489	28.628	1.00	12.11	A	C
ATOM	1328	CB	ILE	355	21.625	-20.608	27.586	1.00	12.12	A	C
ATOM	1329	CG2	ILE	355	20.358	-20.469	26.758	1.00	11.48	A	C
ATOM	1330	CG1	ILE	355	22.879	-20.620	26.719	1.00	10.52	A	C
ATOM	1331	CD1	ILE	355	23.121	-21.949	26.073	1.00	11.77	A	C
ATOM	1332	C	ILE	355	20.432	-19.372	29.420	1.00	14.38	A	C
ATOM	1333	O	ILE	355	20.178	-20.165	30.336	1.00	14.77	A	O
ATOM	1334	N	GLU	356	19.634	-18.360	29.063	1.00	16.82	A	N
ATOM	1335	CA	GLU	356	18.349	-18.043	29.694	1.00	17.30	A	C
ATOM	1336	CB	GLU	356	17.784	-16.750	29.118	1.00	23.18	A	C
ATOM	1337	CG	GLU	356	18.563	-16.207	27.901	1.00	32.26	A	C
ATOM	1338	CD	GLU	356	18.101	-16.777	26.554	1.00	37.15	A	C
ATOM	1339	OE1	GLU	356	18.185	-16.032	25.539	1.00	39.36	A	O

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ATOM	1340	OE2	GLU	356	17.656	-17.955	26.506	1.00	39.75	A	O
ATOM	1341	C	GLU	356	17.317	-19.127	29.554	1.00	15.33	A	C
ATOM	1342	O	GLU	356	17.068	-19.618	28.459	1.00	16.06	A	O
ATOM	1343	N	PRO	357	16.686	-19.511	30.670	1.00	13.70	A	N
ATOM	1344	CD	PRO	357	16.878	-18.999	32.035	1.00	13.19	A	C
ATOM	1345	CA	PRO	357	15.664	-20.557	30.662	1.00	11.23	A	C
ATOM	1346	CB	PRO	357	15.255	-20.638	32.137	1.00	11.80	A	C
ATOM	1347	CG	PRO	357	15.543	-19.280	32.659	1.00	11.07	A	C
ATOM	1348	C	PRO	357	14.470	-20.241	29.782	1.00	10.34	A	C
ATOM	1349	O	PRO	357	14.249	-19.100	29.389	1.00	9.98	A	O
ATOM	1350	N	PRO	358	13.698	-21.269	29.427	1.00	10.92	A	N
ATOM	1351	CD	PRO	358	13.877	-22.699	29.744	1.00	9.85	A	C
ATOM	1352	CA	PRO	358	12.518	-21.049	28.586	1.00	9.33	A	C
ATOM	1353	CB	PRO	358	12.089	-22.471	28.239	1.00	9.45	A	C
ATOM	1354	CG	PRO	358	12.508	-23.259	29.462	1.00	9.62	A	C
ATOM	1355	C	PRO	358	11.440	-20.321	29.397	1.00	9.39	A	C
ATOM	1356	O	PRO	358	11.367	-20.458	30.624	1.00	10.03	A	O
ATOM	1357	N	GLY	359	10.633	-19.512	28.731	1.00	9.12	A	N
ATOM	1358	CA	GLY	359	9.591	-18.815	29.458	1.00	10.28	A	C
ATOM	1359	C	GLY	359	8.698	-17.965	28.592	1.00	10.58	A	C
ATOM	1360	O	GLY	359	8.642	-18.150	27.382	1.00	12.18	A	O
ATOM	1361	N	LEU	360	7.957	-17.056	29.207	1.00	10.13	A	N
ATOM	1362	CA	LEU	360	7.090	-16.200	28.419	1.00	10.03	A	C
ATOM	1363	CB	LEU	360	5.693	-16.094	29.023	1.00	9.41	A	C
ATOM	1364	CG	LEU	360	4.930	-17.411	29.127	1.00	10.39	A	C
ATOM	1365	CD1	LEU	360	3.546	-17.130	29.686	1.00	10.30	A	C
ATOM	1366	CD2	LEU	360	4.856	-18.109	27.765	1.00	8.30	A	C
ATOM	1367	C	LEU	360	7.697	-14.832	28.274	1.00	9.84	A	C
ATOM	1368	O	LEU	360	8.154	-14.221	29.237	1.00	10.83	A	O
ATOM	1369	N	PHE	361	7.769	-14.407	27.030	1.00	10.08	A	N
ATOM	1370	CA	PHE	361	8.290	-13.113	26.648	1.00	10.23	A	C
ATOM	1371	CB	PHE	361	8.409	-13.119	25.127	1.00	11.43	A	C
ATOM	1372	CG	PHE	361	8.859	-11.841	24.541	1.00	12.17	A	C
ATOM	1373	CD1	PHE	361	7.946	-11.001	23.913	1.00	13.72	A	C
ATOM	1374	CD2	PHE	361	10.195	-11.500	24.546	1.00	13.20	A	C
ATOM	1375	CE1	PHE	361	8.358	-9.848	23.293	1.00	14.19	A	C
ATOM	1376	CE2	PHE	361	10.623	-10.344	23.928	1.00	15.05	A	C
ATOM	1377	CZ	PHE	361	9.701	-9.514	23.297	1.00	15.85	A	C
ATOM	1378	C	PHE	361	7.274	-12.080	27.140	1.00	9.14	A	C
ATOM	1379	O	PHE	361	6.081	-12.359	27.214	1.00	8.06	A	O
ATOM	1380	N	ARG	362	7.753	-10.910	27.533	1.00	9.31	A	N
ATOM	1381	CA	ARG	362	6.863	-9.866	28.035	1.00	10.21	A	C
ATOM	1382	CB	ARG	362	6.998	-9.740	29.554	1.00	13.13	A	C
ATOM	1383	CG	ARG	362	5.801	-9.160	30.259	1.00	18.19	A	C
ATOM	1384	CD	ARG	362	5.865	-7.653	30.298	1.00	24.55	A	C
ATOM	1385	NE	ARG	362	4.548	-7.032	30.423	1.00	27.91	A	N
ATOM	1386	CZ	ARG	362	4.003	-6.260	29.486	1.00	30.71	A	C
ATOM	1387	NH1	ARG	362	4.656	-6.017	28.349	1.00	29.83	A	N
ATOM	1388	NH2	ARG	362	2.815	-5.707	29.700	1.00	32.93	A	N
ATOM	1389	C	ARG	362	7.319	-8.605	27.362	1.00	10.41	A	C
ATOM	1390	O	ARG	362	6.510	-7.847	26.848	1.00	11.33	A	O
ATOM	1391	N	GLY	363	8.634	-8.407	27.356	1.00	11.53	A	N
ATOM	1392	CA	GLY	363	9.240	-7.255	26.713	1.00	12.08	A	C
ATOM	1393	C	GLY	363	8.843	-5.925	27.299	1.00	13.06	A	C
ATOM	1394	O	GLY	363	7.922	-5.839	28.114	1.00	13.52	A	O
ATOM	1395	N	ARG	364	9.513	-4.870	26.847	1.00	14.89	A	N
ATOM	1396	CA	ARG	364	9.239	-3.535	27.358	1.00	16.31	A	C
ATOM	1397	CB	ARG	364	10.544	-2.733	27.533	1.00	18.02	A	C
ATOM	1398	CG	ARG	364	11.428	-3.253	28.704	1.00	20.63	A	C
ATOM	1399	CD	ARG	364	12.755	-2.520	28.850	1.00	22.16	A	C
ATOM	1400	NE	ARG	364	13.582	-2.721	27.666	1.00	26.51	A	N
ATOM	1401	CZ	ARG	364	14.676	-3.481	27.614	1.00	28.25	A	C
ATOM	1402	NH1	ARG	364	15.105	-4.128	28.695	1.00	27.99	A	N

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ATOM	1403	NH2	ARG	364	15.343	-3.601	26.468	1.00	27.65	A	N
ATOM	1404	C	ARG	364	8.238	-2.794	26.519	1.00	15.47	A	C
ATOM	1405	O	ARG	364	8.384	-2.687	25.310	1.00	17.47	A	O
ATOM	1406	N	GLY	365	7.180	-2.338	27.171	1.00	15.36	A	N
ATOM	1407	CA	GLY	365	6.155	-1.596	26.478	1.00	15.25	A	C
ATOM	1408	C	GLY	365	5.082	-2.495	25.921	1.00	16.19	A	C
ATOM	1409	O	GLY	365	5.075	-3.698	26.174	1.00	19.23	A	O
ATOM	1410	N	ASN	366	4.201	-1.888	25.132	1.00	16.53	A	N
ATOM	1411	CA	ASN	366	3.054	-2.530	24.495	1.00	15.65	A	C
ATOM	1412	CB	ASN	366	2.136	-1.429	23.975	1.00	16.69	A	C
ATOM	1413	CG	ASN	366	0.751	-1.918	23.679	1.00	18.09	A	C
ATOM	1414	OD1	ASN	366	-0.231	-1.262	24.040	1.00	19.47	A	O
ATOM	1415	ND2	ASN	366	0.651	-3.069	23.014	1.00	17.60	A	N
ATOM	1416	C	ASN	366	3.509	-3.390	23.337	1.00	14.38	A	C
ATOM	1417	O	ASN	366	3.424	-2.971	22.194	1.00	15.35	A	O
ATOM	1418	N	HIS	367	3.890	-4.626	23.626	1.00	12.97	A	N
ATOM	1419	CA	HIS	367	4.422	-5.535	22.611	1.00	10.91	A	C
ATOM	1420	CB	HIS	367	5.544	-6.360	23.238	1.00	11.56	A	C
ATOM	1421	CG	HIS	367	6.604	-6.755	22.274	1.00	9.75	A	C
ATOM	1422	CD2	HIS	367	6.600	-7.645	21.258	1.00	12.39	A	C
ATOM	1423	ND1	HIS	367	7.845	-6.167	22.263	1.00	11.40	A	N
ATOM	1424	CE1	HIS	367	8.563	-6.671	21.278	1.00	12.77	A	C
ATOM	1425	NE2	HIS	367	7.830	-7.572	20.652	1.00	14.53	A	N
ATOM	1426	C	HIS	367	3.430	-6.469	21.915	1.00	10.78	A	C
ATOM	1427	O	HIS	367	2.677	-7.204	22.564	1.00	12.38	A	O
ATOM	1428	N	PRO	368	3.502	-6.535	20.578	1.00	9.34	A	N
ATOM	1429	CD	PRO	368	4.484	-5.813	19.763	1.00	9.11	A	C
ATOM	1430	CA	PRO	368	2.644	-7.366	19.729	1.00	8.48	A	C
ATOM	1431	CB	PRO	368	3.223	-7.142	18.337	1.00	8.33	A	C
ATOM	1432	CG	PRO	368	3.832	-5.814	18.420	1.00	9.79	A	C
ATOM	1433	C	PRO	368	2.781	-8.823	20.060	1.00	9.17	A	C
ATOM	1434	O	PRO	368	1.888	-9.610	19.769	1.00	10.16	A	O
ATOM	1435	N	LYS	369	3.937	-9.173	20.622	1.00	9.16	A	N
ATOM	1436	CA	LYS	369	4.272	-10.543	20.949	1.00	8.74	A	C
ATOM	1437	CB	LYS	369	5.606	-10.896	20.303	1.00	9.75	A	C
ATOM	1438	CG	LYS	369	5.595	-10.941	18.783	1.00	12.93	A	C
ATOM	1439	CD	LYS	369	7.032	-11.027	18.245	1.00	16.19	A	C
ATOM	1440	CE	LYS	369	7.076	-11.204	16.743	1.00	16.85	A	C
ATOM	1441	NZ	LYS	369	6.512	-12.523	16.351	1.00	17.78	A	N
ATOM	1442	C	LYS	369	4.306	-10.950	22.415	1.00	9.18	A	C
ATOM	1443	O	LYS	369	4.771	-12.045	22.724	1.00	9.98	A	O
ATOM	1444	N	MET	370	3.833	-10.106	23.327	1.00	10.08	A	N
ATOM	1445	CA	MET	370	3.854	-10.501	24.734	1.00	11.23	A	C
ATOM	1446	CB	MET	370	3.423	-9.360	25.644	1.00	11.65	A	C
ATOM	1447	CG	MET	370	2.056	-8.800	25.376	1.00	14.02	A	C
ATOM	1448	SD	MET	370	1.738	-7.459	26.530	1.00	21.30	A	S
ATOM	1449	CE	MET	370	0.355	-6.543	25.668	1.00	19.78	A	C
ATOM	1450	C	MET	370	2.985	-11.726	24.973	1.00	12.38	A	C
ATOM	1451	O	MET	370	1.852	-11.786	24.522	1.00	14.09	A	O
ATOM	1452	N	GLY	371	3.541	-12.728	25.639	1.00	12.65	A	N
ATOM	1453	CA	GLY	371	2.790	-13.938	25.915	1.00	11.26	A	C
ATOM	1454	C	GLY	371	3.296	-15.124	25.124	1.00	11.92	A	C
ATOM	1455	O	GLY	371	2.916	-16.255	25.409	1.00	11.08	A	O
ATOM	1456	N	MET	372	4.113	-14.861	24.103	1.00	14.90	A	N
ATOM	1457	CA	MET	372	4.688	-15.919	23.269	1.00	15.78	A	C
ATOM	1458	CB	MET	372	5.385	-15.344	22.038	1.00	15.53	A	C
ATOM	1459	CG	MET	372	4.445	-14.695	21.045	1.00	17.69	A	C
ATOM	1460	SD	MET	372	5.109	-14.751	19.358	1.00	19.98	A	S
ATOM	1461	CE	MET	372	4.703	-16.433	18.926	1.00	19.32	A	C
ATOM	1462	C	MET	372	5.683	-16.741	24.074	1.00	16.38	A	C
ATOM	1463	O	MET	372	6.243	-16.269	25.063	1.00	16.48	A	O
ATOM	1464	N	LEU	373	5.884	-17.982	23.655	1.00	16.51	A	N
ATOM	1465	CA	LEU	373	6.792	-18.893	24.341	1.00	16.73	A	C

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ATOM	1466	CB	LEU	373	6.413	-20.330	23.974	1.00	16.52	A	C
ATOM	1467	CG	LEU	373	7.084	-21.521	24.648	1.00	18.08	A	C
ATOM	1468	CD1	LEU	373	7.084	-21.376	26.179	1.00	19.52	A	C
ATOM	1469	CD2	LEU	373	6.337	-22.774	24.233	1.00	17.25	A	C
ATOM	1470	C	LEU	373	8.239	-18.604	23.972	1.00	16.56	A	C
ATOM	1471	O	LEU	373	8.534	-18.368	22.803	1.00	16.40	A	O
ATOM	1472	N	LYS	374	9.128	-18.587	24.968	1.00	17.21	A	N
ATOM	1473	CA	LYS	374	10.546	-18.337	24.720	1.00	17.98	A	C
ATOM	1474	CB	LYS	374	11.220	-17.589	25.872	1.00	17.75	A	C
ATOM	1475	CG	LYS	374	10.977	-16.090	25.856	1.00	19.19	A	C
ATOM	1476	CD	LYS	374	12.258	-15.303	26.142	1.00	20.98	A	C
ATOM	1477	CE	LYS	374	12.654	-15.280	27.616	1.00	21.14	A	C
ATOM	1478	NZ	LYS	374	11.885	-14.278	28.419	1.00	21.56	A	N
ATOM	1479	C	LYS	374	11.350	-19.578	24.337	1.00	19.06	A	C
ATOM	1480	O	LYS	374	12.444	-19.450	23.811	1.00	23.20	A	O
ATOM	1481	N	ARG	375	10.837	-20.773	24.609	1.00	18.53	A	N
ATOM	1482	CA	ARG	375	11.522	-22.008	24.208	1.00	19.60	A	C
ATOM	1483	CB	ARG	375	11.544	-22.127	22.675	1.00	21.05	A	C
ATOM	1484	CG	ARG	375	12.816	-22.728	22.101	1.00	25.30	A	C
ATOM	1485	CD	ARG	375	12.687	-23.042	20.618	1.00	32.04	A	C
ATOM	1486	NE	ARG	375	13.976	-23.405	20.024	1.00	36.98	A	N
ATOM	1487	CZ	ARG	375	14.869	-22.522	19.569	1.00	39.66	A	C
ATOM	1488	NH1	ARG	375	14.622	-21.215	19.628	1.00	39.46	A	N
ATOM	1489	NH2	ARG	375	16.019	-22.944	19.062	1.00	39.92	A	N
ATOM	1490	C	ARG	375	12.920	-22.265	24.745	1.00	19.47	A	C
ATOM	1491	O	ARG	375	13.749	-21.368	24.797	1.00	18.42	A	O
ATOM	1492	N	ARG	376	13.194	-23.536	25.039	1.00	19.98	A	N
ATOM	1493	CA	ARG	376	14.485	-23.964	25.572	1.00	19.90	A	C
ATOM	1494	CB	ARG	376	14.331	-25.300	26.303	1.00	17.85	A	C
ATOM	1495	CG	ARG	376	15.595	-25.800	27.000	1.00	12.80	A	C
ATOM	1496	CD	ARG	376	15.294	-27.028	27.839	1.00	8.80	A	C
ATOM	1497	NE	ARG	376	14.243	-26.765	28.818	1.00	7.77	A	N
ATOM	1498	CZ	ARG	376	14.461	-26.415	30.081	1.00	6.74	A	C
ATOM	1499	NH1	ARG	376	15.698	-26.286	30.526	1.00	6.41	A	N
ATOM	1500	NH2	ARG	376	13.439	-26.183	30.893	1.00	5.00	A	N
ATOM	1501	C	ARG	376	15.565	-24.078	24.493	1.00	21.40	A	C
ATOM	1502	O	ARG	376	15.303	-24.550	23.379	1.00	22.38	A	O
ATOM	1503	N	ILE	377	16.772	-23.628	24.829	1.00	21.64	A	N
ATOM	1504	CA	ILE	377	17.894	-23.687	23.903	1.00	21.88	A	C
ATOM	1505	CB	ILE	377	18.812	-22.462	24.074	1.00	21.82	A	C
ATOM	1506	CG2	ILE	377	20.078	-22.626	23.267	1.00	21.80	A	C
ATOM	1507	CG1	ILE	377	18.097	-21.212	23.584	1.00	21.50	A	C
ATOM	1508	CD1	ILE	377	17.729	-21.291	22.127	1.00	22.44	A	C
ATOM	1509	C	ILE	377	18.694	-24.986	24.067	1.00	22.53	A	C
ATOM	1510	O	ILE	377	19.248	-25.248	25.129	1.00	22.58	A	O
ATOM	1511	N	MET	378	18.721	-25.798	23.011	1.00	23.75	A	N
ATOM	1512	CA	MET	378	19.436	-27.074	23.004	1.00	24.59	A	C
ATOM	1513	CB	MET	378	18.354	-28.161	22.376	1.00	27.51	A	C
ATOM	1514	CG	MET	378	17.159	-28.258	22.980	1.00	30.77	A	C
ATOM	1515	SD	MET	378	17.229	-28.150	24.784	1.00	37.10	A	S
ATOM	1516	CE	MET	378	16.991	-29.924	25.242	1.00	37.76	A	C
ATOM	1517	C	MET	378	20.747	-26.945	22.221	1.00	23.70	A	C
ATOM	1518	O	MET	378	20.869	-26.068	21.367	1.00	25.00	A	O
ATOM	1519	N	PRO	379	21.736	-27.822	22.492	1.00	22.09	A	N
ATOM	1520	CD	PRO	379	21.699	-28.913	23.478	1.00	21.56	A	C
ATOM	1521	CA	PRO	379	23.035	-27.802	21.813	1.00	21.71	A	C
ATOM	1522	CB	PRO	379	23.678	-29.093	22.286	1.00	20.23	A	C
ATOM	1523	CG	PRO	379	23.155	-29.242	23.645	1.00	20.88	A	C
ATOM	1524	C	PRO	379	22.916	-27.783	20.296	1.00	23.17	A	C
ATOM	1525	O	PRO	379	23.771	-27.237	19.597	1.00	23.42	A	O
ATOM	1526	N	GLU	380	21.834	-28.360	19.792	1.00	23.87	A	N
ATOM	1527	CA	GLU	380	21.594	-28.405	18.361	1.00	25.83	A	C
ATOM	1528	CB	GLU	380	20.532	-29.460	18.043	1.00	28.31	A	C

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ATOM	1529	CG	GLU	380	21.029	-30.909	18.143	1.00	32.71	A	C
ATOM	1530	CD	GLU	380	21.333	-31.392	19.576	1.00	35.32	A	C
ATOM	1531	OE1	GLU	380	21.031	-30.673	20.558	1.00	35.46	A	O
ATOM	1532	OE2	GLU	380	21.862	-32.520	19.715	1.00	36.73	A	O
ATOM	1533	C	GLU	380	21.207	-27.038	17.790	1.00	25.25	A	C
ATOM	1534	O	GLU	380	20.908	-26.915	16.610	1.00	25.75	A	O
ATOM	1535	N	ASP	381	21.224	-26.013	18.634	1.00	25.21	A	N
ATOM	1536	CA	ASP	381	20.898	-24.654	18.213	1.00	24.83	A	C
ATOM	1537	CB	ASP	381	19.755	-24.089	19.051	1.00	28.07	A	C
ATOM	1538	CG	ASP	381	18.416	-24.693	18.683	1.00	32.53	A	C
ATOM	1539	OD1	ASP	381	18.078	-24.661	17.472	1.00	33.33	A	O
ATOM	1540	OD2	ASP	381	17.707	-25.186	19.602	1.00	34.08	A	O
ATOM	1541	C	ASP	381	22.121	-23.773	18.362	1.00	22.45	A	C
ATOM	1542	O	ASP	381	22.308	-22.822	17.600	1.00	21.65	A	O
ATOM	1543	N	ILE	382	22.949	-24.133	19.343	1.00	19.55	A	N
ATOM	1544	CA	ILE	382	24.193	-23.455	19.694	1.00	17.05	A	C
ATOM	1545	CB	ILE	382	24.737	-24.005	21.035	1.00	17.16	A	C
ATOM	1546	CG2	ILE	382	26.037	-23.314	21.406	1.00	16.17	A	C
ATOM	1547	CG1	ILE	382	23.707	-23.838	22.153	1.00	16.61	A	C
ATOM	1548	CD1	ILE	382	23.412	-22.400	22.481	1.00	17.30	A	C
ATOM	1549	C	ILE	382	25.307	-23.622	18.655	1.00	16.96	A	C
ATOM	1550	O	ILE	382	25.581	-24.720	18.179	1.00	16.93	A	O
ATOM	1551	N	ILE	383	25.963	-22.520	18.329	1.00	17.28	A	N
ATOM	1552	CA	ILE	383	27.081	-22.521	17.384	1.00	17.82	A	C
ATOM	1553	CB	ILE	383	26.910	-21.467	16.263	1.00	16.81	A	C
ATOM	1554	CG2	ILE	383	28.198	-21.330	15.459	1.00	12.86	A	C
ATOM	1555	CG1	ILE	383	25.715	-21.807	15.378	1.00	14.47	A	C
ATOM	1556	CD1	ILE	383	25.463	-20.768	14.318	1.00	15.19	A	C
ATOM	1557	C	ILE	383	28.316	-22.119	18.184	1.00	18.73	A	C
ATOM	1558	O	ILE	383	28.301	-21.128	18.924	1.00	21.24	A	O
ATOM	1559	N	ILE	384	29.375	-22.893	18.045	1.00	17.54	A	N
ATOM	1560	CA	ILE	384	30.603	-22.605	18.742	1.00	17.32	A	C
ATOM	1561	CB	ILE	384	31.241	-23.904	19.221	1.00	17.03	A	C
ATOM	1562	CG2	ILE	384	32.645	-23.655	19.742	1.00	18.03	A	C
ATOM	1563	CG1	ILE	384	30.324	-24.595	20.243	1.00	17.51	A	C
ATOM	1564	CD1	ILE	384	30.052	-23.833	21.541	1.00	14.81	A	C
ATOM	1565	C	ILE	384	31.565	-21.876	17.810	1.00	18.83	A	C
ATOM	1566	O	ILE	384	31.627	-22.158	16.606	1.00	19.11	A	O
ATOM	1567	N	ASN	385	32.298	-20.922	18.372	1.00	19.79	A	N
ATOM	1568	CA	ASN	385	33.289	-20.151	17.626	1.00	20.34	A	C
ATOM	1569	CB	ASN	385	32.862	-18.685	17.540	1.00	19.44	A	C
ATOM	1570	CG	ASN	385	33.768	-17.862	16.645	1.00	20.29	A	C
ATOM	1571	OD1	ASN	385	34.582	-18.399	15.897	1.00	21.98	A	O
ATOM	1572	ND2	ASN	385	33.627	-16.546	16.716	1.00	19.89	A	N
ATOM	1573	C	ASN	385	34.601	-20.263	18.392	1.00	21.48	A	C
ATOM	1574	O	ASN	385	34.629	-20.048	19.603	1.00	23.40	A	O
ATOM	1575	N	CYS	386	35.670	-20.665	17.713	1.00	22.91	A	N
ATOM	1576	CA	CYS	386	36.980	-20.782	18.364	1.00	25.06	A	C
ATOM	1577	CB	CYS	386	36.988	-21.920	19.375	1.00	24.16	A	C
ATOM	1578	SG	CYS	386	36.772	-23.493	18.625	1.00	25.04	A	S
ATOM	1579	C	CYS	386	38.085	-20.980	17.342	1.00	25.90	A	C
ATOM	1580	O	CYS	386	37.808	-21.100	16.153	1.00	26.72	A	O
ATOM	1581	N	SER	387	39.336	-20.981	17.788	1.00	26.75	A	N
ATOM	1582	CA	SER	387	40.448	-21.151	16.855	1.00	28.82	A	C
ATOM	1583	CB	SER	387	41.735	-20.516	17.394	1.00	27.55	A	C
ATOM	1584	OG	SER	387	41.987	-20.881	18.737	1.00	26.84	A	O
ATOM	1585	C	SER	387	40.679	-22.607	16.484	1.00	30.68	A	C
ATOM	1586	O	SER	387	40.444	-23.510	17.294	1.00	31.45	A	O
ATOM	1587	N	LYS	388	41.125	-22.830	15.250	1.00	32.38	A	N
ATOM	1588	CA	LYS	388	41.381	-24.183	14.768	1.00	33.86	A	C
ATOM	1589	CB	LYS	388	41.933	-24.160	13.336	1.00	36.39	A	C
ATOM	1590	CG	LYS	388	40.861	-24.234	12.244	1.00	38.89	A	C
ATOM	1591	CD	LYS	388	41.459	-24.326	10.839	1.00	39.74	A	C

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ATOM	1592	CE	LYS	388	40.362	-24.364	9.779	1.00	41.25	A	N
ATOM	1593	NZ	LYS	388	39.502	-23.137	9.805	1.00	41.25	A	N
ATOM	1594	C	LYS	388	42.310	-25.002	15.657	1.00	33.62	A	C
ATOM	1595	O	LYS	388	42.251	-26.230	15.642	1.00	34.16	A	O
ATOM	1596	N	ASP	389	43.148	-24.332	16.443	1.00	32.85	A	N
ATOM	1597	CA	ASP	389	44.080	-25.041	17.300	1.00	32.26	A	C
ATOM	1598	CB	ASP	389	45.509	-24.540	17.093	1.00	35.23	A	C
ATOM	1599	CG	ASP	389	45.686	-23.061	17.431	1.00	38.31	A	C
ATOM	1600	OD1	ASP	389	46.814	-22.701	17.861	1.00	38.98	A	O
ATOM	1601	OD2	ASP	389	44.731	-22.263	17.242	1.00	39.85	A	O
ATOM	1602	C	ASP	389	43.730	-25.052	18.766	1.00	31.31	A	C
ATOM	1603	O	ASP	389	44.612	-25.148	19.621	1.00	31.61	A	O
ATOM	1604	N	ALA	390	42.439	-24.990	19.059	1.00	29.78	A	N
ATOM	1605	CA	ALA	390	41.978	-25.022	20.439	1.00	28.85	A	C
ATOM	1606	CB	ALA	390	41.108	-23.814	20.740	1.00	27.55	A	C
ATOM	1607	C	ALA	390	41.200	-26.307	20.681	1.00	28.96	A	C
ATOM	1608	O	ALA	390	40.749	-26.970	19.733	1.00	28.84	A	O
ATOM	1609	N	LYS	391	41.072	-26.663	21.955	1.00	29.16	A	N
ATOM	1610	CA	LYS	391	40.341	-27.856	22.365	1.00	29.43	A	C
ATOM	1611	CB	LYS	391	40.740	-28.243	23.796	1.00	29.80	A	C
ATOM	1612	CG	LYS	391	40.141	-29.547	24.333	1.00	30.58	A	C
ATOM	1613	CD	LYS	391	40.538	-29.756	25.805	1.00	31.58	A	C
ATOM	1614	CE	LYS	391	40.066	-31.094	26.350	1.00	32.16	A	C
ATOM	1615	NZ	LYS	391	38.594	-31.299	26.190	1.00	34.89	A	N
ATOM	1616	C	LYS	391	38.861	-27.503	22.314	1.00	29.05	A	C
ATOM	1617	O	LYS	391	38.372	-26.739	23.155	1.00	29.86	A	O
ATOM	1618	N	VAL	392	38.170	-28.015	21.297	1.00	27.78	A	N
ATOM	1619	CA	VAL	392	36.740	-27.769	21.119	1.00	28.35	A	C
ATOM	1620	CB	VAL	392	36.247	-28.411	19.807	1.00	26.26	A	C
ATOM	1621	CG1	VAL	392	34.749	-28.599	19.827	1.00	27.20	A	C
ATOM	1622	CG2	VAL	392	36.635	-27.525	18.640	1.00	24.97	A	C
ATOM	1623	C	VAL	392	35.914	-28.238	22.332	1.00	28.84	A	C
ATOM	1624	O	VAL	392	36.072	-29.371	22.790	1.00	28.74	A	O
ATOM	1625	N	PRO	393	35.021	-27.363	22.859	1.00	29.91	A	N
ATOM	1626	CD	PRO	393	34.691	-26.041	22.291	1.00	30.33	A	C
ATOM	1627	CA	PRO	393	34.162	-27.641	24.017	1.00	31.17	A	C
ATOM	1628	CB	PRO	393	33.352	-26.347	24.166	1.00	30.05	A	C
ATOM	1629	CG	PRO	393	33.278	-25.820	22.783	1.00	29.85	A	C
ATOM	1630	C	PRO	393	33.266	-28.868	23.895	1.00	32.15	A	C
ATOM	1631	O	PRO	393	32.719	-29.162	22.825	1.00	30.97	A	O
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ATOM	1655	CB	PRO	397	26.584	-36.630	28.172	1.00	40.31	A	C
ATOM	1656	CG	PRO	397	27.532	-35.676	28.880	1.00	41.04	A	C
ATOM	1657	C	PRO	397	25.051	-36.344	26.190	1.00	37.42	A	C
ATOM	1658	O	PRO	397	24.000	-36.254	26.817	1.00	36.90	A	C
ATOM	1659	N	GLY	398	25.106	-36.764	24.935	1.00	36.04	A	N
ATOM	1660	CA	GLY	398	23.895	-37.149	24.240	1.00	36.02	A	C
ATOM	1661	C	GLY	398	23.660	-36.282	23.021	1.00	36.63	A	C
ATOM	1662	O	GLY	398	23.517	-36.786	21.905	1.00	35.80	A	O
ATOM	1663	N	HIS	399	23.650	-34.971	23.233	1.00	37.49	A	N
ATOM	1664	CA	HIS	399	23.432	-34.011	22.151	1.00	38.37	A	C
ATOM	1665	CB	HIS	399	22.726	-32.769	22.702	1.00	40.71	A	C
ATOM	1666	CG	HIS	399	21.563	-33.079	23.591	1.00	44.17	A	C
ATOM	1667	CD2	HIS	399	20.469	-33.853	23.392	1.00	45.63	A	C
ATOM	1668	ND1	HIS	399	21.448	-32.574	24.869	1.00	45.82	A	N
ATOM	1669	CE1	HIS	399	20.334	-33.024	25.420	1.00	46.23	A	C
ATOM	1670	NE2	HIS	399	19.722	-33.802	24.545	1.00	46.95	A	N
ATOM	1671	C	HIS	399	24.746	-33.600	21.462	1.00	36.94	A	C
ATOM	1672	O	HIS	399	25.829	-34.030	21.868	1.00	35.64	A	O
ATOM	1673	N	LYS	400	24.632	-32.778	20.416	1.00	35.41	A	N
ATOM	1674	CA	LYS	400	25.792	-32.278	19.668	1.00	34.45	A	C
ATOM	1675	CB	LYS	400	26.007	-33.125	18.406	1.00	35.67	A	C
ATOM	1676	CG	LYS	400	25.302	-32.599	17.138	1.00	38.57	A	C
ATOM	1677	CD	LYS	400	25.576	-33.482	15.915	1.00	41.80	A	C
ATOM	1678	CE	LYS	400	27.081	-33.776	15.720	1.00	43.36	A	C
ATOM	1679	NZ	LYS	400	27.367	-34.909	14.769	1.00	42.85	A	N
ATOM	1680	C	LYS	400	25.616	-30.793	19.271	1.00	32.47	A	C
ATOM	1681	O	LYS	400	24.482	-30.305	19.176	1.00	32.26	A	O
ATOM	1682	N	TRP	401	26.723	-30.078	19.041	1.00	29.15	A	N
ATOM	1683	CA	TRP	401	26.644	-28.668	18.625	1.00	26.08	A	C
ATOM	1684	CB	TRP	401	28.024	-28.003	18.531	1.00	21.88	A	C
ATOM	1685	CG	TRP	401	28.825	-27.973	19.781	1.00	16.61	A	C
ATOM	1686	CD2	TRP	401	28.389	-27.584	21.086	1.00	14.81	A	C
ATOM	1687	CE2	TRP	401	29.489	-27.741	21.953	1.00	14.70	A	C
ATOM	1688	CE3	TRP	401	27.178	-27.121	21.610	1.00	15.69	A	C
ATOM	1689	CD1	TRP	401	30.123	-28.326	19.904	1.00	16.00	A	C
ATOM	1690	NE1	TRP	401	30.535	-28.195	21.201	1.00	15.54	A	N
ATOM	1691	CZ2	TRP	401	29.420	-27.457	23.321	1.00	13.61	A	C
ATOM	1692	CZ3	TRP	401	27.107	-26.835	22.978	1.00	15.26	A	C
ATOM	1693	CH2	TRP	401	28.227	-27.008	23.815	1.00	13.83	A	C
ATOM	1694	C	TRP	401	26.001	-28.569	17.247	1.00	25.93	A	C
ATOM	1695	O	TRP	401	25.951	-29.549	16.503	1.00	26.19	A	O
ATOM	1696	N	LYS	402	25.513	-27.379	16.911	1.00	26.56	A	N
ATOM	1697	CA	LYS	402	24.889	-27.145	15.613	1.00	26.72	A	C
ATOM	1698	CB	LYS	402	24.005	-25.899	15.668	1.00	24.90	A	C
ATOM	1699	CG	LYS	402	23.389	-25.488	14.346	1.00	23.51	A	C
ATOM	1700	CD	LYS	402	22.182	-24.585	14.589	1.00	23.89	A	C
ATOM	1701	CE	LYS	402	21.702	-23.925	13.312	1.00	23.95	A	C
ATOM	1702	NZ	LYS	402	22.717	-22.958	12.807	1.00	24.19	A	N
ATOM	1703	C	LYS	402	25.976	-26.980	14.566	1.00	27.15	A	C
ATOM	1704	O	LYS	402	25.919	-27.577	13.500	1.00	27.51	A	O
ATOM	1705	N	GLU	403	26.999	-26.215	14.924	1.00	28.52	A	N
ATOM	1706	CA	GLU	403	28.132	-25.932	14.050	1.00	28.71	A	C
ATOM	1707	CB	GLU	403	27.739	-24.838	13.054	1.00	27.43	A	C
ATOM	1708	CG	GLU	403	28.826	-24.435	12.075	1.00	29.99	A	C
ATOM	1709	CD	GLU	403	28.529	-23.109	11.389	1.00	32.43	A	C
ATOM	1710	OE1	GLU	403	27.330	-22.776	11.236	1.00	35.52	A	O
ATOM	1711	OE2	GLU	403	29.488	-22.393	11.016	1.00	31.40	A	O
ATOM	1712	C	GLU	403	29.304	-25.452	14.913	1.00	28.22	A	C
ATOM	1713	O	GLU	403	29.113	-25.050	16.060	1.00	30.37	A	O
ATOM	1714	N	VAL	404	30.520	-25.546	14.388	1.00	26.51	A	N
ATOM	1715	CA	VAL	404	31.695	-25.078	15.108	1.00	24.56	A	C
ATOM	1716	CB	VAL	404	32.535	-26.235	15.666	1.00	24.34	A	C
ATOM	1717	CG1	VAL	404	33.883	-25.711	16.169	1.00	22.63	A	C

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ATOM	1718	CG2	VAL	404	31.781	-26.956	16.767	1.00	25.27	A	C
ATOM	1719	C	VAL	404	32.571	-24.314	14.136	1.00	24.25	A	C
ATOM	1720	O	VAL	404	33.251	-24.930	13.314	1.00	23.68	A	O
ATOM	1721	N	ARG	405	32.540	-22.984	14.183	1.00	23.19	A	N
ATOM	1722	CA	ARG	405	33.405	-22.264	13.266	1.00	22.80	A	C
ATOM	1723	CB	ARG	405	32.639	-21.373	12.287	1.00	22.51	A	C
ATOM	1724	CG	ARG	405	31.726	-20.303	12.820	1.00	19.52	A	C
ATOM	1725	CD	ARG	405	31.072	-19.710	11.576	1.00	19.33	A	C
ATOM	1726	NE	ARG	405	30.141	-18.618	11.821	1.00	20.75	A	N
ATOM	1727	CZ	ARG	405	28.844	-18.773	12.063	1.00	20.31	A	C
ATOM	1728	NH1	ARG	405	28.306	-19.987	12.106	1.00	18.99	A	N
ATOM	1729	NH2	ARG	405	28.081	-17.702	12.232	1.00	20.70	A	N
ATOM	1730	C	ARG	405	34.611	-21.567	13.854	1.00	22.71	A	C
ATOM	1731	O	ARG	405	34.854	-21.622	15.061	1.00	22.87	A	O
ATOM	1732	N	HIS	406	35.419	-20.992	12.972	1.00	22.04	A	N
ATOM	1733	CA	HIS	406	36.635	-20.310	13.389	1.00	22.11	A	C
ATOM	1734	CB	HIS	406	37.827	-21.179	13.027	1.00	23.14	A	C
ATOM	1735	CG	HIS	406	37.552	-22.637	13.201	1.00	25.66	A	C
ATOM	1736	CD2	HIS	406	37.128	-23.573	12.319	1.00	26.30	A	C
ATOM	1737	ND1	HIS	406	37.604	-23.261	14.428	1.00	26.62	A	N
ATOM	1738	CE1	HIS	406	37.221	-24.518	14.297	1.00	27.99	A	C
ATOM	1739	NE2	HIS	406	36.925	-24.732	13.027	1.00	28.48	A	N
ATOM	1740	C	HIS	406	36.698	-18.949	12.730	1.00	20.68	A	C
ATOM	1741	O	HIS	406	37.706	-18.562	12.136	1.00	20.41	A	O
ATOM	1742	N	ASP	407	35.590	-18.233	12.858	1.00	19.17	A	N
ATOM	1743	CA	ASP	407	35.448	-16.910	12.305	1.00	20.29	A	C
ATOM	1744	CB	ASP	407	33.959	-16.562	12.260	1.00	20.76	A	C
ATOM	1745	CG	ASP	407	33.666	-15.318	11.451	1.00	22.48	A	C
ATOM	1746	OD1	ASP	407	34.564	-14.792	10.755	1.00	24.25	A	O
ATOM	1747	OD2	ASP	407	32.512	-14.863	11.513	1.00	24.48	A	O
ATOM	1748	C	ASP	407	36.245	-15.888	13.146	1.00	20.36	A	C
ATOM	1749	O	ASP	407	35.745	-15.353	14.141	1.00	21.43	A	O
ATOM	1750	N	ASN	408	37.486	-15.629	12.734	1.00	18.29	A	N
ATOM	1751	CA	ASN	408	38.359	-14.695	13.435	1.00	16.98	A	C
ATOM	1752	CB	ASN	408	39.830	-14.984	13.106	1.00	17.95	A	C
ATOM	1753	CG	ASN	408	40.223	-14.566	11.687	1.00	18.65	A	C
ATOM	1754	OD1	ASN	408	39.440	-13.958	10.944	1.00	17.54	A	O
ATOM	1755	ND2	ASN	408	41.460	-14.885	11.312	1.00	18.27	A	N
ATOM	1756	C	ASN	408	38.034	-13.242	13.113	1.00	16.47	A	C
ATOM	1757	O	ASN	408	38.743	-12.330	13.531	1.00	16.01	A	O
ATOM	1758	N	LYS	409	36.991	-13.034	12.323	1.00	15.13	A	N
ATOM	1759	CA	LYS	409	36.594	-11.691	11.950	1.00	13.52	A	C
ATOM	1760	CB	LYS	409	36.084	-11.683	10.513	1.00	16.47	A	C
ATOM	1761	CG	LYS	409	37.099	-12.123	9.483	1.00	19.45	A	C
ATOM	1762	CD	LYS	409	38.209	-11.113	9.393	1.00	23.02	A	C
ATOM	1763	CE	LYS	409	39.226	-11.486	8.342	1.00	26.22	A	C
ATOM	1764	NZ	LYS	409	40.150	-10.336	8.091	1.00	28.53	A	N
ATOM	1765	C	LYS	409	35.520	-11.155	12.882	1.00	11.16	A	C
ATOM	1766	O	LYS	409	35.109	-10.015	12.750	1.00	11.30	A	O
ATOM	1767	N	VAL	410	35.068	-11.985	13.818	1.00	8.66	A	N
ATOM	1768	CA	VAL	410	34.024	-11.602	14.761	1.00	7.05	A	C
ATOM	1769	CB	VAL	410	32.720	-12.424	14.535	1.00	6.92	A	C
ATOM	1770	CG1	VAL	410	32.153	-12.151	13.145	1.00	6.57	A	C
ATOM	1771	CG2	VAL	410	32.979	-13.908	14.717	1.00	5.14	A	C
ATOM	1772	C	VAL	410	34.479	-11.750	16.210	1.00	6.83	A	C
ATOM	1773	O	VAL	410	35.438	-12.446	16.494	1.00	8.11	A	O
ATOM	1774	N	THR	411	33.716	-11.173	17.126	1.00	6.89	A	N
ATOM	1775	CA	THR	411	34.038	-11.165	18.545	1.00	7.17	A	C
ATOM	1776	CB	THR	411	33.828	-9.722	19.059	1.00	8.21	A	C
ATOM	1777	OG1	THR	411	34.915	-8.904	18.610	1.00	11.48	A	O
ATOM	1778	CG2	THR	411	33.689	-9.639	20.568	1.00	9.13	A	C
ATOM	1779	C	THR	411	33.308	-12.164	19.445	1.00	8.25	A	C
ATOM	1780	O	THR	411	33.686	-12.335	20.608	1.00	9.32	A	O

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ATOM	1781	N	TRP	412	32.295	-12.850	18.909	1.00	8.63	A	N
ATOM	1782	CA	TRP	412	31.499	-13.804	19.693	1.00	6.16	A	C
ATOM	1783	CB	TRP	412	30.071	-13.887	19.147	1.00	5.06	A	C
ATOM	1784	CG	TRP	412	29.953	-14.140	17.682	1.00	4.97	A	C
ATOM	1785	CD2	TRP	412	29.725	-15.404	17.035	1.00	5.07	A	C
ATOM	1786	CE2	TRP	412	29.587	-15.147	15.658	1.00	3.84	A	C
ATOM	1787	CE3	TRP	412	29.621	-16.729	17.489	1.00	4.35	A	C
ATOM	1788	CD1	TRP	412	29.955	-13.207	16.698	1.00	6.54	A	C
ATOM	1789	NE1	TRP	412	29.732	-13.798	15.478	1.00	5.64	A	N
ATOM	1790	CZ2	TRP	412	29.350	-16.158	14.730	1.00	3.15	A	C
ATOM	1791	CZ3	TRP	412	29.385	-17.728	16.567	1.00	2.31	A	C
ATOM	1792	CH2	TRP	412	29.252	-17.437	15.203	1.00	2.04	A	C
ATOM	1793	C	TRP	412	32.056	-15.201	19.958	1.00	5.07	A	C
ATOM	1794	O	TRP	412	32.908	-15.681	19.235	1.00	4.56	A	O
ATOM	1795	N	LEU	413	31.569	-15.835	21.023	1.00	6.75	A	N
ATOM	1796	CA	LEU	413	31.991	-17.181	21.425	1.00	7.80	A	C
ATOM	1797	CB	LEU	413	32.297	-17.226	22.930	1.00	7.47	A	C
ATOM	1798	CG	LEU	413	33.355	-16.249	23.454	1.00	9.29	A	C
ATOM	1799	CD1	LEU	413	33.684	-16.544	24.917	1.00	8.81	A	C
ATOM	1800	CD2	LEU	413	34.592	-16.354	22.609	1.00	7.06	A	C
ATOM	1801	C	LEU	413	30.948	-18.248	21.120	1.00	8.57	A	C
ATOM	1802	O	LEU	413	31.295	-19.370	20.770	1.00	9.42	A	O
ATOM	1803	N	VAL	414	29.677	-17.896	21.299	1.00	9.29	A	N
ATOM	1804	CA	VAL	414	28.540	-18.791	21.081	1.00	9.38	A	C
ATOM	1805	CB	VAL	414	28.002	-19.315	22.424	1.00	7.04	A	C
ATOM	1806	CG1	VAL	414	26.896	-20.290	22.195	1.00	9.16	A	C
ATOM	1807	CG2	VAL	414	29.071	-19.970	23.197	1.00	7.58	A	C
ATOM	1808	C	VAL	414	27.399	-17.995	20.429	1.00	12.24	A	C
ATOM	1809	O	VAL	414	27.181	-16.829	20.773	1.00	13.63	A	O
ATOM	1810	N	SER	415	26.643	-18.636	19.537	1.00	13.45	A	N
ATOM	1811	CA	SER	415	25.520	-17.985	18.857	1.00	14.78	A	C
ATOM	1812	CB	SER	415	25.884	-17.666	17.411	1.00	14.32	A	C
ATOM	1813	OG	SER	415	26.793	-16.606	17.327	1.00	17.66	A	O
ATOM	1814	C	SER	415	24.340	-18.923	18.789	1.00	16.27	A	C
ATOM	1815	O	SER	415	24.511	-20.122	18.916	1.00	19.07	A	O
ATOM	1816	N	TRP	416	23.152	-18.381	18.537	1.00	16.31	A	N
ATOM	1817	CA	TRP	416	21.949	-19.187	18.373	1.00	15.48	A	C
ATOM	1818	CB	TRP	416	21.629	-19.986	19.627	1.00	15.92	A	C
ATOM	1819	CG	TRP	416	21.239	-19.187	20.783	1.00	19.33	A	C
ATOM	1820	CD2	TRP	416	22.100	-18.699	21.806	1.00	22.20	A	C
ATOM	1821	CE2	TRP	416	21.291	-18.028	22.748	1.00	23.38	A	C
ATOM	1822	CE3	TRP	416	23.481	-18.764	22.023	1.00	23.95	A	C
ATOM	1823	CD1	TRP	416	19.977	-18.806	21.125	1.00	21.71	A	C
ATOM	1824	NE1	TRP	416	19.996	-18.109	22.310	1.00	23.54	A	N
ATOM	1825	CZ2	TRP	416	21.819	-17.422	23.890	1.00	24.91	A	C
ATOM	1826	CZ3	TRP	416	24.006	-18.164	23.158	1.00	25.57	A	C
ATOM	1827	CH2	TRP	416	23.176	-17.500	24.078	1.00	25.86	A	C
ATOM	1828	C	TRP	416	20.786	-18.294	17.988	1.00	15.95	A	C
ATOM	1829	O	TRP	416	20.774	-17.127	18.340	1.00	15.57	A	O
ATOM	1830	N	THR	417	19.824	-18.822	17.236	1.00	17.36	A	N
ATOM	1831	CA	THR	417	18.673	-18.018	16.822	1.00	18.08	A	C
ATOM	1832	CB	THR	417	18.152	-18.432	15.426	1.00	19.37	A	C
ATOM	1833	OG1	THR	417	19.248	-18.474	14.500	1.00	22.03	A	O
ATOM	1834	CG2	THR	417	17.113	-17.433	14.917	1.00	18.77	A	C
ATOM	1835	C	THR	417	17.535	-18.093	17.828	1.00	17.50	A	C
ATOM	1836	O	THR	417	17.117	-19.174	18.231	1.00	16.76	A	O
ATOM	1837	N	GLU	418	17.070	-16.929	18.259	1.00	17.91	A	N
ATOM	1838	CA	GLU	418	15.980	-16.849	19.214	1.00	19.98	A	C
ATOM	1839	CB	GLU	418	16.182	-15.654	20.146	1.00	19.56	A	C
ATOM	1840	CG	GLU	418	16.366	-14.321	19.430	1.00	21.00	A	C
ATOM	1841	CD	GLU	418	15.072	-13.515	19.287	1.00	23.03	A	C
ATOM	1842	OE1	GLU	418	13.963	-14.074	19.489	1.00	21.46	A	O
ATOM	1843	OE2	GLU	418	15.178	-12.303	18.985	1.00	23.66	A	O

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ATOM	1844	C	GLU	418	14.670	-16.748	18.440	1.00	22.02	A	C
ATOM	1845	O	GLU	418	14.555	-15.976	17.487	1.00	23.31	A	O
ATOM	1846	N	ASN	419	13.687	-17.525	18.876	1.00	22.82	A	N
ATOM	1847	CA	ASN	419	12.368	-17.620	18.251	1.00	23.06	A	C
ATOM	1848	CB	ASN	419	11.627	-18.833	18.842	1.00	24.01	A	C
ATOM	1849	CG	ASN	419	11.733	-18.909	20.381	1.00	25.14	A	C
ATOM	1850	OD1	ASN	419	10.721	-18.886	21.085	1.00	22.42	A	O
ATOM	1851	ND2	ASN	419	12.966	-19.006	20.898	1.00	26.63	A	N
ATOM	1852	C	ASN	419	11.430	-16.394	18.216	1.00	23.17	A	C
ATOM	1853	O	ASN	419	10.685	-16.218	17.250	1.00	23.28	A	O
ATOM	1854	N	ILE	420	11.467	-15.546	19.243	1.00	22.64	A	N
ATOM	1855	CA	ILE	420	10.577	-14.386	19.296	1.00	21.41	A	C
ATOM	1856	CB	ILE	420	10.688	-13.638	20.643	1.00	21.00	A	C
ATOM	1857	CG2	ILE	420	9.685	-12.493	20.708	1.00	20.88	A	C
ATOM	1858	CG1	ILE	420	10.421	-14.605	21.795	1.00	19.25	A	C
ATOM	1859	CD1	ILE	420	9.146	-15.375	21.663	1.00	17.47	A	C
ATOM	1860	C	ILE	420	10.718	-13.417	18.128	1.00	21.14	A	C
ATOM	1861	O	ILE	420	9.728	-13.104	17.476	1.00	21.08	A	O
ATOM	1862	N	GLN	421	11.926	-12.919	17.881	1.00	21.50	A	N
ATOM	1863	CA	GLN	421	12.154	-11.997	16.762	1.00	22.52	A	C
ATOM	1864	CB	GLN	421	12.917	-10.746	17.200	1.00	22.04	A	C
ATOM	1865	CG	GLN	421	12.447	-10.122	18.466	1.00	22.74	A	C
ATOM	1866	CD	GLN	421	10.998	-9.764	18.427	1.00	23.58	A	C
ATOM	1867	OE1	GLN	421	10.397	-9.678	17.361	1.00	23.22	A	O
ATOM	1868	NE2	GLN	421	10.415	-9.548	19.600	1.00	25.91	A	N
ATOM	1869	C	GLN	421	12.954	-12.670	15.646	1.00	23.41	A	C
ATOM	1870	O	GLN	421	13.146	-12.084	14.577	1.00	23.53	A	O
ATOM	1871	N	GLY	422	13.474	-13.867	15.924	1.00	23.10	A	N
ATOM	1872	CA	GLY	422	14.253	-14.595	14.938	1.00	21.69	A	C
ATOM	1873	C	GLY	422	15.676	-14.102	14.764	1.00	21.11	A	C
ATOM	1874	O	GLY	422	16.371	-14.568	13.869	1.00	22.55	A	O
ATOM	1875	N	SER	423	16.106	-13.156	15.597	1.00	19.12	A	N
ATOM	1876	CA	SER	423	17.463	-12.612	15.522	1.00	17.44	A	C
ATOM	1877	CB	SER	423	17.534	-11.244	16.189	1.00	17.46	A	C
ATOM	1878	OG	SER	423	17.375	-11.377	17.593	1.00	21.04	A	O
ATOM	1879	C	SER	423	18.488	-13.549	16.173	1.00	17.07	A	C
ATOM	1880	O	SER	423	18.130	-14.589	16.747	1.00	16.68	A	O
ATOM	1881	N	ILE	424	19.760	-13.156	16.102	1.00	15.26	A	N
ATOM	1882	CA	ILE	424	20.837	-13.955	16.661	1.00	12.63	A	C
ATOM	1883	CB	ILE	424	22.077	-13.960	15.748	1.00	12.36	A	C
ATOM	1884	CG2	ILE	424	23.131	-14.909	16.309	1.00	13.16	A	C
ATOM	1885	CG1	ILE	424	21.717	-14.393	14.336	1.00	9.97	A	C
ATOM	1886	CD1	ILE	424	22.868	-14.273	13.394	1.00	9.54	A	C
ATOM	1887	C	ILE	424	21.315	-13.437	17.995	1.00	11.22	A	C
ATOM	1888	O	ILE	424	21.700	-12.281	18.094	1.00	14.20	A	O
ATOM	1889	N	LYS	425	21.279	-14.284	19.016	1.00	8.51	A	N
ATOM	1890	CA	LYS	425	21.784	-13.915	20.337	1.00	8.52	A	C
ATOM	1891	CB	LYS	425	21.024	-14.619	21.457	1.00	7.39	A	C
ATOM	1892	CG	LYS	425	19.589	-14.210	21.621	1.00	10.00	A	C
ATOM	1893	CD	LYS	425	19.420	-12.829	22.251	1.00	11.12	A	C
ATOM	1894	CE	LYS	425	17.932	-12.529	22.479	1.00	11.95	A	C
ATOM	1895	NZ	LYS	425	17.656	-11.153	22.963	1.00	15.07	A	N
ATOM	1896	C	LYS	425	23.232	-14.400	20.371	1.00	8.31	A	C
ATOM	1897	O	LYS	425	23.585	-15.353	19.649	1.00	9.23	A	O
ATOM	1898	N	TYR	426	24.055	-13.768	21.212	1.00	5.53	A	N
ATOM	1899	CA	TYR	426	25.456	-14.135	21.335	1.00	2.63	A	C
ATOM	1900	CB	TYR	426	26.326	-13.128	20.615	1.00	1.00	A	C
ATOM	1901	CG	TYR	426	25.970	-12.864	19.175	1.00	1.54	A	C
ATOM	1902	CD1	TYR	426	25.035	-11.891	18.844	1.00	1.00	A	C
ATOM	1903	CE1	TYR	426	24.777	-11.573	17.535	1.00	1.00	A	C
ATOM	1904	CD2	TYR	426	26.629	-13.529	18.139	1.00	1.00	A	C
ATOM	1905	CE2	TYR	426	26.370	-13.224	16.817	1.00	1.00	A	C
ATOM	1906	CZ	TYR	426	25.445	-12.232	16.516	1.00	1.00	A	C

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ATOM	1907	OH	TYR	426	25.222	-11.838	15.205	1.00	1.00	A	O
ATOM	1908	C	TYR	426	25.910	-14.130	22.766	1.00	3.15	A	C
ATOM	1909	O	TYR	426	25.210	-13.637	23.636	1.00	3.79	A	O
ATOM	1910	N	ILE	427	27.077	-14.725	23.006	1.00	3.72	A	N
ATOM	1911	CA	ILE	427	27.717	-14.722	24.324	1.00	3.93	A	C
ATOM	1912	CB	ILE	427	27.907	-16.108	24.926	1.00	2.63	A	C
ATOM	1913	CG2	ILE	427	28.614	-15.996	26.251	1.00	1.00	A	C
ATOM	1914	CG1	ILE	427	26.561	-16.775	25.156	1.00	4.23	A	C
ATOM	1915	CD1	ILE	427	26.695	-18.208	25.661	1.00	7.01	A	C
ATOM	1916	C	ILE	427	29.092	-14.153	24.010	1.00	6.24	A	C
ATOM	1917	O	ILE	427	29.843	-14.740	23.231	1.00	7.23	A	O
ATOM	1918	N	MET	428	29.412	-12.994	24.572	1.00	6.26	A	N
ATOM	1919	CA	MET	428	30.695	-12.377	24.294	1.00	7.70	A	C
ATOM	1920	CB	MET	428	30.460	-11.046	23.576	1.00	9.69	A	C
ATOM	1921	CG	MET	428	29.949	-11.190	22.144	1.00	12.04	A	C
ATOM	1922	SD	MET	428	29.107	-9.703	21.521	1.00	15.55	A	S
ATOM	1923	CE	MET	428	28.265	-10.346	20.076	1.00	12.65	A	C
ATOM	1924	C	MET	428	31.505	-12.186	25.576	1.00	8.32	A	C
ATOM	1925	O	MET	428	31.142	-12.705	26.629	1.00	8.81	A	O
ATOM	1926	N	LEU	429	32.599	-11.436	25.490	1.00	8.24	A	N
ATOM	1927	CA	LEU	429	33.434	-11.196	26.655	1.00	7.97	A	C
ATOM	1928	CB	LEU	429	34.870	-10.934	26.212	1.00	6.19	A	C
ATOM	1929	CG	LEU	429	35.441	-12.179	25.541	1.00	5.35	A	C
ATOM	1930	CD1	LEU	429	36.868	-11.974	25.147	1.00	6.30	A	C
ATOM	1931	CD2	LEU	429	35.331	-13.349	26.478	1.00	6.31	A	C
ATOM	1932	C	LEU	429	32.893	-10.076	27.550	1.00	8.13	A	C
ATOM	1933	O	LEU	429	32.244	-9.156	27.060	1.00	7.53	A	O
ATOM	1934	N	ASN	430	33.122	-10.182	28.862	1.00	8.18	A	N
ATOM	1935	CA	ASN	430	32.637	-9.182	29.799	1.00	8.37	A	C
ATOM	1936	CB	ASN	430	32.568	-9.756	31.221	1.00	11.53	A	C
ATOM	1937	CG	ASN	430	33.693	-9.302	32.114	1.00	14.60	A	C
ATOM	1938	OD1	ASN	430	33.479	-9.026	33.297	1.00	17.15	A	O
ATOM	1939	ND2	ASN	430	34.907	-9.288	31.585	1.00	16.44	A	N
ATOM	1940	C	ASN	430	33.442	-7.901	29.655	1.00	8.55	A	C
ATOM	1941	O	ASN	430	34.580	-7.937	29.209	1.00	8.32	A	O
ATOM	1942	N	PRO	431	32.827	-6.745	29.955	1.00	9.17	A	N
ATOM	1943	CD	PRO	431	31.458	-6.669	30.496	1.00	10.05	A	C
ATOM	1944	CA	PRO	431	33.403	-5.402	29.869	1.00	8.54	A	C
ATOM	1945	CB	PRO	431	32.475	-4.590	30.749	1.00	9.41	A	C
ATOM	1946	CG	PRO	431	31.152	-5.188	30.410	1.00	9.91	A	C
ATOM	1947	C	PRO	431	34.843	-5.186	30.229	1.00	8.13	A	C
ATOM	1948	O	PRO	431	35.429	-4.229	29.778	1.00	7.93	A	O
ATOM	1949	N	SER	432	35.415	-6.090	31.018	1.00	9.73	A	N
ATOM	1950	CA	SER	432	36.808	-6.007	31.472	1.00	9.91	A	C
ATOM	1951	CB	SER	432	37.025	-6.956	32.644	1.00	8.94	A	C
ATOM	1952	OG	SER	432	36.114	-6.692	33.689	1.00	14.14	A	O
ATOM	1953	C	SER	432	37.829	-6.365	30.411	1.00	10.57	A	C
ATOM	1954	O	SER	432	38.969	-5.898	30.443	1.00	11.10	A	O
ATOM	1955	N	SER	433	37.428	-7.254	29.513	1.00	12.21	A	N
ATOM	1956	CA	SER	433	38.280	-7.734	28.436	1.00	13.93	A	C
ATOM	1957	CB	SER	433	37.490	-8.644	27.511	1.00	15.24	A	C
ATOM	1958	OG	SER	433	36.444	-7.919	26.894	1.00	17.54	A	O
ATOM	1959	C	SER	433	38.889	-6.632	27.605	1.00	14.91	A	C
ATOM	1960	O	SER	433	38.393	-5.506	27.572	1.00	14.77	A	O
ATOM	1961	N	ARG	434	39.967	-6.977	26.917	1.00	15.38	A	N
ATOM	1962	CA	ARG	434	40.645	-6.026	26.069	1.00	15.16	A	C
ATOM	1963	CB	ARG	434	41.875	-6.670	25.456	1.00	14.40	A	C
ATOM	1964	CG	ARG	434	42.635	-5.722	24.564	1.00	17.54	A	C
ATOM	1965	CD	ARG	434	43.122	-6.397	23.299	1.00	21.56	A	C
ATOM	1966	NE	ARG	434	42.113	-6.472	22.238	1.00	22.99	A	N
ATOM	1967	CZ	ARG	434	41.863	-7.565	21.523	1.00	23.89	A	C
ATOM	1968	NH1	ARG	434	42.536	-8.691	21.761	1.00	24.31	A	N
ATOM	1969	NH2	ARG	434	40.986	-7.514	20.528	1.00	25.11	A	N

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ATOM	1970	C	ARG	434	39.699	-5.614	24.949	1.00	14.96	A	C
ATOM	1971	O	ARG	434	39.463	-4.427	24.719	1.00	15.59	A	O
ATOM	1972	N	ILE	435	39.106	-6.623	24.318	1.00	13.23	A	N
ATOM	1973	CA	ILE	435	38.212	-6.441	23.187	1.00	11.80	A	C
ATOM	1974	CB	ILE	435	37.719	-7.810	22.662	1.00	12.07	A	C
ATOM	1975	CG2	ILE	435	36.582	-8.337	23.501	1.00	11.59	A	C
ATOM	1976	CG1	ILE	435	37.305	-7.703	21.203	1.00	12.09	A	C
ATOM	1977	CD1	ILE	435	37.295	-9.033	20.513	1.00	14.20	A	C
ATOM	1978	C	ILE	435	37.066	-5.453	23.390	1.00	10.64	A	C
ATOM	1979	O	ILE	435	36.809	-4.633	22.514	1.00	11.67	A	O
ATOM	1980	N	LYS	436	36.377	-5.527	24.525	1.00	8.39	A	N
ATOM	1981	CA	LYS	436	35.293	-4.592	24.807	1.00	5.80	A	C
ATOM	1982	CB	LYS	436	34.506	-5.006	26.050	1.00	3.31	A	C
ATOM	1983	CG	LYS	436	33.607	-6.190	25.856	1.00	3.86	A	C
ATOM	1984	CD	LYS	436	32.458	-5.845	24.941	1.00	3.91	A	C
ATOM	1985	CE	LYS	436	31.802	-7.100	24.417	1.00	4.68	A	C
ATOM	1986	NZ	LYS	436	30.701	-6.807	23.486	1.00	5.04	A	N
ATOM	1987	C	LYS	436	35.962	-3.259	25.075	1.00	6.32	A	C
ATOM	1988	O	LYS	436	36.069	-2.425	24.186	1.00	6.67	A	O
ATOM	1989	N	GLY	437	36.503	-3.125	26.285	1.00	5.77	A	N
ATOM	1990	CA	GLY	437	37.173	-1.911	26.721	1.00	3.67	A	C
ATOM	1991	C	GLY	437	38.039	-1.144	25.744	1.00	2.58	A	C
ATOM	1992	O	GLY	437	38.161	0.063	25.884	1.00	1.61	A	O
ATOM	1993	N	GLU	438	38.682	-1.823	24.796	1.00	3.63	A	N
ATOM	1994	CA	GLU	438	39.514	-1.110	23.840	1.00	2.88	A	C
ATOM	1995	CB	GLU	438	40.430	-2.026	23.050	1.00	3.51	A	C
ATOM	1996	CG	GLU	438	41.208	-1.203	22.052	1.00	11.90	A	C
ATOM	1997	CD	GLU	438	42.468	-1.850	21.551	1.00	17.01	A	C
ATOM	1998	OE1	GLU	438	42.341	-2.713	20.650	1.00	19.60	A	O
ATOM	1999	OE2	GLU	438	43.576	-1.462	22.027	1.00	18.58	A	O
ATOM	2000	C	GLU	438	38.641	-0.365	22.882	1.00	2.28	A	C
ATOM	2001	O	GLU	438	38.952	0.725	22.453	1.00	2.75	A	O
ATOM	2002	N	LYS	439	37.527	-0.979	22.549	1.00	4.38	A	N
ATOM	2003	CA	LYS	439	36.572	-0.395	21.640	1.00	6.45	A	C
ATOM	2004	CB	LYS	439	35.628	-1.510	21.163	1.00	7.55	A	C
ATOM	2005	CG	LYS	439	34.664	-1.146	20.063	1.00	10.65	A	C
ATOM	2006	CD	LYS	439	34.576	-2.276	19.057	1.00	13.94	A	C
ATOM	2007	CE	LYS	439	35.514	-2.038	17.879	1.00	17.02	A	C
ATOM	2008	NZ	LYS	439	36.924	-1.811	18.322	1.00	19.48	A	N
ATOM	2009	C	LYS	439	35.855	0.753	22.374	1.00	6.22	A	C
ATOM	2010	O	LYS	439	35.601	1.798	21.796	1.00	6.32	A	O
ATOM	2011	N	ASP	440	35.615	0.580	23.669	1.00	7.11	A	N
ATOM	2012	CA	ASP	440	34.956	1.602	24.472	1.00	9.63	A	C
ATOM	2013	CB	ASP	440	34.607	1.043	25.857	1.00	11.01	A	C
ATOM	2014	CG	ASP	440	33.457	1.792	26.524	1.00	13.46	A	C
ATOM	2015	OD1	ASP	440	32.647	2.434	25.811	1.00	14.64	A	O
ATOM	2016	OE2	ASP	440	33.346	1.722	27.766	1.00	15.56	A	O
ATOM	2017	C	ASP	440	35.864	2.844	24.602	1.00	10.54	A	C
ATOM	2018	O	ASP	440	35.393	3.994	24.613	1.00	9.49	A	O
ATOM	2019	N	TRP	441	37.167	2.603	24.703	1.00	9.81	A	N
ATOM	2020	CA	TRP	441	38.134	3.674	24.792	1.00	10.00	A	C
ATOM	2021	CB	TRP	441	39.518	3.070	25.057	1.00	11.37	A	C
ATOM	2022	CG	TRP	441	40.680	3.945	24.784	1.00	13.42	A	C
ATOM	2023	CD2	TRP	441	41.381	4.062	23.541	1.00	17.42	A	C
ATOM	2024	CE2	TRP	441	42.419	4.993	23.739	1.00	18.29	A	C
ATOM	2025	CE3	TRP	441	41.233	3.467	22.270	1.00	18.47	A	C
ATOM	2026	CD1	TRP	441	41.300	4.777	25.655	1.00	12.17	A	C
ATOM	2027	NE1	TRP	441	42.345	5.413	25.042	1.00	13.48	A	N
ATOM	2028	CZ2	TRP	441	43.319	5.353	22.704	1.00	20.36	A	C
ATOM	2029	CZ3	TRP	441	42.129	3.822	21.241	1.00	19.37	A	C
ATOM	2030	CH2	TRP	441	43.156	4.757	21.470	1.00	17.86	A	C
ATOM	2031	C	TRP	441	38.056	4.435	23.461	1.00	10.72	A	C
ATOM	2032	O	TRP	441	37.932	5.663	23.451	1.00	11.01	A	O

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ATOM	2033	N	GLN	442	38.029	3.694	22.351	1.00	9.56	A	N
ATOM	2034	CA	GLN	442	37.938	4.285	21.021	1.00	9.09	A	C
ATOM	2035	CB	GLN	442	37.953	3.208	19.946	1.00	11.01	A	C
ATOM	2036	CG	GLN	442	39.335	2.633	19.672	1.00	17.94	A	C
ATOM	2037	CD	GLN	442	39.287	1.253	19.023	1.00	20.97	A	C
ATOM	2038	OE1	GLN	442	40.271	0.491	19.062	1.00	20.11	A	O
ATOM	2039	NE2	GLN	442	38.129	0.914	18.438	1.00	20.72	A	N
ATOM	2040	C	GLN	442	36.682	5.108	20.861	1.00	8.21	A	C
ATOM	2041	O	GLN	442	36.686	6.117	20.157	1.00	9.62	A	O
ATOM	2042	N	LYS	443	35.606	4.680	21.517	1.00	6.33	A	N
ATOM	2043	CA	LYS	443	34.325	5.377	21.440	1.00	4.49	A	C
ATOM	2044	CB	LYS	443	33.260	4.637	22.239	1.00	1.47	A	C
ATOM	2045	CG	LYS	443	31.852	5.034	21.864	1.00	1.00	A	C
ATOM	2046	CD	LYS	443	30.844	4.382	22.775	1.00	1.00	A	C
ATOM	2047	CE	LYS	443	30.967	4.927	24.174	1.00	1.00	A	C
ATOM	2048	NZ	LYS	443	30.474	3.930	25.141	1.00	1.00	A	N
ATOM	2049	C	LYS	443	34.457	6.799	21.957	1.00	5.07	A	C
ATOM	2050	O	LYS	443	34.048	7.733	21.294	1.00	4.29	A	O
ATOM	2051	N	TYR	444	35.030	6.949	23.146	1.00	7.27	A	N
ATOM	2052	CA	TYR	444	35.237	8.258	23.754	1.00	8.28	A	C
ATOM	2053	CB	TYR	444	35.533	8.125	25.262	1.00	7.89	A	C
ATOM	2054	CG	TYR	444	34.394	7.496	26.057	1.00	6.80	A	C
ATOM	2055	CD1	TYR	444	33.219	8.191	26.312	1.00	7.04	A	C
ATOM	2056	CE1	TYR	444	32.148	7.581	26.969	1.00	6.50	A	C
ATOM	2057	CD2	TYR	444	34.473	6.183	26.493	1.00	6.02	A	C
ATOM	2058	CE2	TYR	444	33.423	5.581	27.146	1.00	5.64	A	C
ATOM	2059	CZ	TYR	444	32.268	6.275	27.371	1.00	5.88	A	C
ATOM	2060	OH	TYR	444	31.218	5.603	27.935	1.00	9.21	A	O
ATOM	2061	C	TYR	444	36.345	9.031	23.028	1.00	9.26	A	C
ATOM	2062	O	TYR	444	36.395	10.252	23.091	1.00	10.27	A	O
ATOM	2063	N	GLU	445	37.220	8.320	22.325	1.00	9.89	A	N
ATOM	2064	CA	GLU	445	38.271	8.977	21.560	1.00	10.70	A	C
ATOM	2065	CB	GLU	445	39.433	8.034	21.295	1.00	10.33	A	C
ATOM	2066	CG	GLU	445	40.444	8.012	22.401	1.00	14.32	A	C
ATOM	2067	CD	GLU	445	40.969	9.396	22.737	1.00	17.45	A	C
ATOM	2068	OE1	GLU	445	40.285	10.122	23.490	1.00	20.47	A	O
ATOM	2069	OE2	GLU	445	42.070	9.760	22.265	1.00	19.12	A	O
ATOM	2070	C	GLU	445	37.727	9.516	20.238	1.00	11.83	A	C
ATOM	2071	O	GLU	445	38.417	10.234	19.518	1.00	13.15	A	O
ATOM	2072	N	THR	446	36.498	9.125	19.910	1.00	12.69	A	N
ATOM	2073	CA	THR	446	35.815	9.567	18.698	1.00	12.37	A	C
ATOM	2074	CB	THR	446	34.924	8.440	18.120	1.00	9.46	A	C
ATOM	2075	OG1	THR	446	35.738	7.510	17.397	1.00	6.50	A	O
ATOM	2076	CG2	THR	446	33.858	8.998	17.205	1.00	6.91	A	C
ATOM	2077	C	THR	446	34.984	10.796	19.062	1.00	14.03	A	C
ATOM	2078	O	THR	446	35.000	11.790	18.351	1.00	15.53	A	O
ATOM	2079	N	ALA	447	34.292	10.731	20.192	1.00	15.28	A	N
ATOM	2080	CA	ALA	447	33.483	11.839	20.669	1.00	17.98	A	C
ATOM	2081	CB	ALA	447	32.711	11.412	21.894	1.00	17.76	A	C
ATOM	2082	C	ALA	447	34.381	13.051	20.993	1.00	21.09	A	C
ATOM	2083	O	ALA	447	33.904	14.196	21.060	1.00	22.73	A	O
ATOM	2084	N	ARG	448	35.664	12.790	21.243	1.00	21.22	A	N
ATOM	2085	CA	ARG	448	36.620	13.852	21.522	1.00	21.39	A	C
ATOM	2086	CB	ARG	448	37.791	13.342	22.357	1.00	22.10	A	C
ATOM	2087	CG	ARG	448	37.454	13.155	23.816	1.00	23.24	A	C
ATOM	2088	CD	ARG	448	38.594	12.517	24.578	1.00	22.19	A	C
ATOM	2089	NE	ARG	448	39.713	13.431	24.757	1.00	22.28	A	N
ATOM	2090	CZ	ARG	448	40.863	13.096	25.329	1.00	21.36	A	C
ATOM	2091	NH1	ARG	448	41.053	11.863	25.772	1.00	22.05	A	N
ATOM	2092	NH2	ARG	448	41.804	14.004	25.497	1.00	21.42	A	N
ATOM	2093	C	ARG	448	37.141	14.440	20.222	1.00	22.10	A	C
ATOM	2094	O	ARG	448	37.628	15.565	20.201	1.00	22.78	A	O
ATOM	2095	N	ARG	449	37.102	13.666	19.145	1.00	22.13	A	N

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ATOM	2096	CA	ARG	449	37.551	14.194	17.871	1.00	23.76	A	C
ATOM	2097	CB	ARG	449	37.878	13.093	16.867	1.00	25.81	A	C
ATOM	2098	CG	ARG	449	39.299	12.546	16.986	1.00	29.05	A	C
ATOM	2099	CD	ARG	449	39.662	11.585	15.854	1.00	31.21	A	C
ATOM	2100	NE	ARG	449	38.758	10.436	15.787	1.00	33.95	A	N
ATOM	2101	CZ	ARG	449	37.909	10.213	14.787	1.00	36.16	A	C
ATOM	2102	NH1	ARG	449	37.857	11.060	13.758	1.00	35.74	A	N
ATOM	2103	NH2	ARG	449	37.072	9.178	14.841	1.00	36.11	A	N
ATOM	2104	C	ARG	449	36.456	15.087	17.334	1.00	24.12	A	C
ATOM	2105	O	ARG	449	36.730	16.060	16.637	1.00	26.72	A	O
ATOM	2106	N	LEU	450	35.217	14.783	17.702	1.00	23.48	A	N
ATOM	2107	CA	LEU	450	34.074	15.574	17.264	1.00	23.57	A	C
ATOM	2108	CB	LEU	450	32.760	14.793	17.434	1.00	21.11	A	C
ATOM	2109	CG	LEU	450	31.462	15.586	17.269	1.00	18.96	A	C
ATOM	2110	CD1	LEU	450	31.375	16.116	15.874	1.00	21.49	A	C
ATOM	2111	CD2	LEU	450	30.256	14.749	17.568	1.00	19.37	A	C
ATOM	2112	C	LEU	450	33.984	16.896	18.008	1.00	24.57	A	C
ATOM	2113	O	LEU	450	33.450	17.857	17.479	1.00	26.02	A	O
ATOM	2114	N	LYS	451	34.496	16.945	19.233	1.00	25.33	A	N
ATOM	2115	CA	LYS	451	34.441	18.166	20.028	1.00	27.15	A	C
ATOM	2116	CB	LYS	451	35.179	17.971	21.346	1.00	26.70	A	C
ATOM	2117	CG	LYS	451	35.071	19.129	22.313	1.00	25.90	A	C
ATOM	2118	CD	LYS	451	36.066	18.997	23.474	1.00	25.83	A	C
ATOM	2119	CE	LYS	451	37.541	19.121	23.036	1.00	25.74	A	C
ATOM	2120	NZ	LYS	451	38.157	17.833	22.579	1.00	23.14	A	N
ATOM	2121	C	LYS	451	35.073	19.306	19.252	1.00	30.11	A	C
ATOM	2122	O	LYS	451	34.507	20.397	19.152	1.00	31.08	A	O
ATOM	2123	N	LYS	452	36.230	19.033	18.659	1.00	32.60	A	N
ATOM	2124	CA	LYS	452	36.937	20.036	17.877	1.00	34.48	A	C
ATOM	2125	CB	LYS	452	38.448	19.836	18.016	1.00	35.21	A	C
ATOM	2126	CG	LYS	452	38.961	18.467	17.590	1.00	36.06	A	C
ATOM	2127	CD	LYS	452	40.480	18.399	17.694	1.00	37.61	A	C
ATOM	2128	CE	LYS	452	41.173	19.465	16.827	1.00	39.35	A	C
ATOM	2129	NZ	LYS	452	40.931	19.304	15.350	1.00	38.74	A	N
ATOM	2130	C	LYS	452	36.500	20.021	16.406	1.00	35.96	A	C
ATOM	2131	O	LYS	452	37.304	20.236	15.495	1.00	37.03	A	O
ATOM	2132	N	CYS	453	35.208	19.795	16.192	1.00	36.37	A	N
ATOM	2133	CA	CYS	453	34.620	19.749	14.857	1.00	37.72	A	C
ATOM	2134	CB	CYS	453	34.555	18.298	14.351	1.00	39.52	A	C
ATOM	2135	SG	CYS	453	35.798	17.788	13.131	1.00	45.86	A	S
ATOM	2136	C	CYS	453	33.193	20.277	14.933	1.00	37.22	A	C
ATOM	2137	O	CYS	453	32.674	20.834	13.967	1.00	36.69	A	O
ATOM	2138	N	VAL	454	32.572	20.100	16.098	1.00	36.51	A	N
ATOM	2139	CA	VAL	454	31.186	20.490	16.321	1.00	35.73	A	C
ATOM	2140	CB	VAL	454	30.717	20.105	17.727	1.00	34.41	A	C
ATOM	2141	CG1	VAL	454	31.340	21.002	18.769	1.00	33.87	A	C
ATOM	2142	CG2	VAL	454	29.209	20.129	17.788	1.00	34.59	A	C
ATOM	2143	C	VAL	454	30.780	21.928	15.999	1.00	36.11	A	C
ATOM	2144	O	VAL	454	29.806	22.139	15.287	1.00	35.73	A	O
ATOM	2145	N	ASP	455	31.512	22.913	16.508	1.00	37.14	A	N
ATOM	2146	CA	ASP	455	31.181	24.307	16.233	1.00	37.41	A	C
ATOM	2147	CB	ASP	455	32.142	25.256	16.945	1.00	39.91	A	C
ATOM	2148	CG	ASP	455	31.786	25.448	18.414	1.00	43.04	A	C
ATOM	2149	OD1	ASP	455	30.579	25.349	18.756	1.00	45.24	A	O
ATOM	2150	OD2	ASP	455	32.710	25.701	19.224	1.00	44.36	A	O
ATOM	2151	C	ASP	455	31.167	24.555	14.741	1.00	36.58	A	C
ATOM	2152	O	ASP	455	30.314	25.283	14.241	1.00	36.68	A	O
ATOM	2153	N	LYS	456	32.092	23.923	14.025	1.00	35.30	A	N
ATOM	2154	CA	LYS	456	32.132	24.051	12.574	1.00	33.70	A	C
ATOM	2155	CB	LYS	456	33.379	23.348	12.010	1.00	33.45	A	C
ATOM	2156	CG	LYS	456	33.584	23.443	10.497	1.00	31.94	A	C
ATOM	2157	CD	LYS	456	35.076	23.351	10.139	1.00	32.57	A	C
ATOM	2158	CE	LYS	456	35.507	21.993	9.614	1.00	33.06	A	C



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ATOM	2159	NZ	LYS	456	35.146	21.819	8.185	1.00	33.76	A	N
ATOM	2160	C	LYS	456	30.841	23.394	12.068	1.00	33.26	A	C
ATOM	2161	O	LYS	456	30.039	24.041	11.393	1.00	34.02	A	O
ATOM	2162	N	ILE	457	30.593	22.162	12.527	1.00	31.61	A	N
ATOM	2163	CA	ILE	457	29.414	21.376	12.151	1.00	30.31	A	C
ATOM	2164	CB	ILE	457	29.420	19.988	12.851	1.00	30.12	A	C
ATOM	2165	CG2	ILE	457	28.045	19.350	12.818	1.00	29.23	A	C
ATOM	2166	CG1	ILE	457	30.430	19.061	12.170	1.00	31.00	A	C
ATOM	2167	CD1	ILE	457	30.577	17.705	12.818	1.00	30.42	A	C
ATOM	2168	C	ILE	457	28.089	22.078	12.413	1.00	30.08	A	C
ATOM	2169	O	ILE	457	27.164	21.973	11.621	1.00	29.92	A	O
ATOM	2170	N	ARG	458	28.001	22.785	13.527	1.00	31.15	A	N
ATOM	2171	CA	ARG	458	26.786	23.511	13.883	1.00	32.80	A	C
ATOM	2172	CB	ARG	458	26.822	23.928	15.359	1.00	30.57	A	C
ATOM	2173	CG	ARG	458	26.758	22.754	16.318	1.00	28.23	A	C
ATOM	2174	CD	ARG	458	27.082	23.165	17.728	1.00	27.50	A	C
ATOM	2175	NE	ARG	458	26.805	22.091	18.675	1.00	25.89	A	N
ATOM	2176	CZ	ARG	458	27.277	22.051	19.917	1.00	25.96	A	C
ATOM	2177	NH1	ARG	458	28.057	23.023	20.368	1.00	25.50	A	N
ATOM	2178	NH2	ARG	458	26.976	21.035	20.707	1.00	25.14	A	N
ATOM	2179	C	ARG	458	26.559	24.734	12.989	1.00	34.89	A	C
ATOM	2180	O	ARG	458	25.421	25.034	12.629	1.00	36.16	A	O
ATOM	2181	N	ASN	459	27.639	25.435	12.635	1.00	36.73	A	N
ATOM	2182	CA	ASN	459	27.548	26.621	11.778	1.00	37.90	A	C
ATOM	2183	CB	ASN	459	28.904	27.333	11.671	1.00	37.51	A	C
ATOM	2184	CG	ASN	459	29.307	28.011	12.962	1.00	38.19	A	C
ATOM	2185	OD1	ASN	459	30.487	28.319	13.182	1.00	38.73	A	O
ATOM	2186	ND2	ASN	459	28.328	28.240	13.836	1.00	36.90	A	N
ATOM	2187	C	ASN	459	27.045	26.273	10.385	1.00	38.29	A	C
ATOM	2188	O	ASN	459	26.330	27.060	9.763	1.00	38.53	A	O
ATOM	2189	N	GLN	460	27.411	25.089	9.904	1.00	38.41	A	N
ATOM	2190	CA	GLN	460	26.986	24.664	8.587	1.00	39.28	A	C
ATOM	2191	CB	GLN	460	27.911	23.584	8.022	1.00	40.67	A	C
ATOM	2192	CG	GLN	460	27.869	23.504	6.491	1.00	43.49	A	C
ATOM	2193	CD	GLN	460	28.103	22.097	5.961	1.00	46.43	A	C
ATOM	2194	OE1	GLN	460	27.173	21.443	5.463	1.00	48.02	A	O
ATOM	2195	NE2	GLN	460	29.346	21.618	6.065	1.00	45.93	A	N
ATOM	2196	C	GLN	460	25.541	24.181	8.572	1.00	38.99	A	C
ATOM	2197	O	GLN	460	24.788	24.519	7.666	1.00	39.64	A	O
ATOM	2198	N	TYR	461	25.127	23.416	9.575	1.00	39.26	A	N
ATOM	2199	CA	TYR	461	23.754	22.943	9.562	1.00	39.86	A	C
ATOM	2200	CB	TYR	461	23.561	21.690	10.448	1.00	39.09	A	C
ATOM	2201	CG	TYR	461	23.454	21.866	11.955	1.00	38.17	A	C
ATOM	2202	CD1	TYR	461	22.517	22.731	12.515	1.00	38.34	A	C
ATOM	2203	CE1	TYR	461	22.338	22.816	13.881	1.00	36.90	A	C
ATOM	2204	CD2	TYR	461	24.220	21.088	12.822	1.00	36.99	A	C
ATOM	2205	CE2	TYR	461	24.043	21.167	14.198	1.00	36.01	A	C
ATOM	2206	CZ	TYR	461	23.097	22.036	14.714	1.00	36.08	A	C
ATOM	2207	OH	TYR	461	22.894	22.152	16.063	1.00	36.54	A	O
ATOM	2208	C	TYR	461	22.731	24.059	9.808	1.00	41.05	A	C
ATOM	2209	O	TYR	461	21.586	23.967	9.357	1.00	39.87	A	O
ATOM	2210	N	ARG	462	23.163	25.134	10.472	1.00	43.30	A	N
ATOM	2211	CA	ARG	462	22.290	26.285	10.732	1.00	45.70	A	C
ATOM	2212	CB	ARG	462	22.898	27.255	11.748	1.00	47.37	A	C
ATOM	2213	CG	ARG	462	22.238	27.180	13.119	1.00	50.67	A	C
ATOM	2214	CD	ARG	462	22.535	28.403	13.973	1.00	53.60	A	C
ATOM	2215	NE	ARG	462	22.025	29.635	13.366	1.00	56.23	A	N
ATOM	2216	CZ	ARG	462	22.235	30.856	13.855	1.00	57.50	A	C
ATOM	2217	NH1	ARG	462	21.740	31.921	13.235	1.00	57.49	A	N
ATOM	2218	NH2	ARG	462	22.932	31.015	14.974	1.00	58.76	A	N
ATOM	2219	C	ARG	462	22.048	27.020	9.428	1.00	45.72	A	C
ATOM	2220	O	ARG	462	21.046	27.713	9.271	1.00	46.75	A	O
ATOM	2221	N	GLU	463	22.986	26.873	8.500	1.00	45.32	A	N

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ATOM	2222	CA	GLU	463	22.863	27.498	7.200	1.00	45.47	A	C
ATOM	2223	CB	GLU	463	24.223	28.000	6.714	1.00	47.44	A	C
ATOM	2224	CG	GLU	463	24.489	29.449	7.105	1.00	51.20	A	C
ATOM	2225	CD	GLU	463	25.959	29.741	7.345	1.00	54.43	A	C
ATOM	2226	OE1	GLU	463	26.743	29.721	6.365	1.00	55.77	A	O
ATOM	2227	OE2	GLU	463	26.328	29.996	8.520	1.00	55.15	A	O
ATOM	2228	C	GLU	463	22.204	26.561	6.191	1.00	44.45	A	C
ATOM	2229	O	GLU	463	21.472	27.017	5.314	1.00	44.86	A	O
ATOM	2230	N	ASP	464	22.417	25.254	6.342	1.00	43.38	A	N
ATOM	2231	CA	ASP	464	21.809	24.274	5.440	1.00	42.69	A	C
ATOM	2232	CB	ASP	464	22.273	22.853	5.778	1.00	43.35	A	C
ATOM	2233	CG	ASP	464	23.748	22.627	5.492	1.00	44.89	A	C
ATOM	2234	OD1	ASP	464	24.436	23.580	5.067	1.00	46.42	A	O
ATOM	2235	OD2	ASP	464	24.229	21.490	5.696	1.00	45.53	A	O
ATOM	2236	C	ASP	464	20.291	24.361	5.542	1.00	42.35	A	C
ATOM	2237	O	ASP	464	19.574	23.882	4.671	1.00	41.87	A	O
ATOM	2238	N	TRP	465	19.819	24.998	6.610	1.00	42.72	A	N
ATOM	2239	CA	TRP	465	18.398	25.193	6.867	1.00	43.72	A	C
ATOM	2240	CB	TRP	465	18.201	25.918	8.193	1.00	44.13	A	C
ATOM	2241	CG	TRP	465	18.507	25.125	9.396	1.00	45.35	A	C
ATOM	2242	CD2	TRP	465	18.668	25.624	10.728	1.00	45.28	A	C
ATOM	2243	CE2	TRP	465	18.894	24.512	11.565	1.00	46.26	A	C
ATOM	2244	CE3	TRP	465	18.638	26.902	11.296	1.00	44.64	A	C
ATOM	2245	CD1	TRP	465	18.643	23.773	9.474	1.00	46.38	A	C
ATOM	2246	NE1	TRP	465	18.873	23.394	10.774	1.00	47.19	A	N
ATOM	2247	CZ2	TRP	465	19.090	24.640	12.942	1.00	45.92	A	C
ATOM	2248	CZ3	TRP	465	18.832	27.029	12.662	1.00	44.66	A	C
ATOM	2249	CH2	TRP	465	19.056	25.903	13.470	1.00	45.74	A	C
ATOM	2250	C	TRP	465	17.718	26.041	5.807	1.00	44.73	A	C
ATOM	2251	O	TRP	465	16.503	25.962	5.634	1.00	44.31	A	O
ATOM	2252	N	LYS	466	18.503	26.889	5.147	1.00	46.48	A	N
ATOM	2253	CA	LYS	466	17.997	27.809	4.135	1.00	48.23	A	C
ATOM	2254	CB	LYS	466	18.601	29.198	4.362	1.00	48.39	A	C
ATOM	2255	CG	LYS	466	18.305	29.785	5.736	1.00	49.15	A	C
ATOM	2256	CD	LYS	466	19.114	31.055	5.993	1.00	50.15	A	C
ATOM	2257	CE	LYS	466	18.689	31.745	7.289	1.00	50.50	A	C
ATOM	2258	NZ	LYS	466	17.290	32.282	7.241	1.00	49.14	A	N
ATOM	2259	C	LYS	466	18.238	27.394	2.694	1.00	49.18	A	C
ATOM	2260	O	LYS	466	17.642	27.966	1.784	1.00	50.09	A	O
ATOM	2261	N	SER	467	19.097	26.402	2.482	1.00	50.20	A	N
ATOM	2262	CA	SER	467	19.415	25.946	1.130	1.00	51.52	A	C
ATOM	2263	CB	SER	467	20.240	24.655	1.168	1.00	51.21	A	C
ATOM	2264	OG	SER	467	19.472	23.568	1.651	1.00	49.89	A	O
ATOM	2265	C	SER	467	18.174	25.737	0.269	1.00	52.81	A	C
ATOM	2266	O	SER	467	17.069	25.550	0.781	1.00	52.41	A	O
ATOM	2267	N	LYS	468	18.369	25.799	-1.044	1.00	54.90	A	N
ATOM	2268	CA	LYS	468	17.298	25.611	-2.008	1.00	56.62	A	C
ATOM	2269	CB	LYS	468	17.797	25.893	-3.427	1.00	58.21	A	C
ATOM	2270	CG	LYS	468	18.184	27.350	-3.679	1.00	60.92	A	C
ATOM	2271	CD	LYS	468	18.977	27.512	-4.980	1.00	63.43	A	C
ATOM	2272	CE	LYS	468	18.202	27.030	-6.223	1.00	65.58	A	C
ATOM	2273	NZ	LYS	468	17.023	27.880	-6.590	1.00	64.74	A	N
ATOM	2274	C	LYS	468	16.780	24.179	-1.924	1.00	56.39	A	C
ATOM	2275	O	LYS	468	15.617	23.935	-1.594	1.00	56.95	A	O
ATOM	2276	N	GLU	469	17.692	23.246	-2.174	1.00	55.97	A	N
ATOM	2277	CA	GLU	469	17.429	21.812	-2.158	1.00	55.76	A	C
ATOM	2278	CB	GLU	469	18.767	21.090	-2.259	1.00	54.55	A	C
ATOM	2279	CG	GLU	469	18.696	19.698	-2.813	1.00	54.01	A	C
ATOM	2280	CD	GLU	469	20.069	19.125	-3.100	1.00	53.64	A	C
ATOM	2281	OE1	GLU	469	21.081	19.825	-2.854	1.00	51.65	A	O
ATOM	2282	OE2	GLU	469	20.131	17.973	-3.584	1.00	53.25	A	O
ATOM	2283	C	GLU	469	16.671	21.353	-0.908	1.00	56.03	A	C
ATOM	2284	O	GLU	469	17.111	21.588	0.217	1.00	55.96	A	O

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ATOM	2285	N	MET	470	15.530	20.701	-1.112	1.00	56.58	A	N
ATOM	2286	CA	MET	470	14.709	20.224	0.003	1.00	57.11	A	C
ATOM	2287	CB	MET	470	13.287	19.905	-0.477	1.00	58.96	A	C
ATOM	2288	CG	MET	470	12.303	19.547	0.636	1.00	60.67	A	C
ATOM	2289	SD	MET	470	12.220	20.800	1.938	1.00	63.86	A	S
ATOM	2290	CE	MET	470	11.059	21.978	1.232	1.00	63.33	A	C
ATOM	2291	C	MET	470	15.305	19.031	0.764	1.00	56.31	A	C
ATOM	2292	O	MET	470	15.083	18.890	1.967	1.00	56.80	A	O
ATOM	2293	N	LYS	471	16.061	18.181	0.067	1.00	55.01	A	N
ATOM	2294	CA	LYS	471	16.695	17.017	0.689	1.00	53.06	A	C
ATOM	2295	CB	LYS	471	17.575	16.275	-0.328	1.00	54.07	A	C
ATOM	2296	CG	LYS	471	16.827	15.253	-1.176	1.00	57.21	A	C
ATOM	2297	CD	LYS	471	17.738	14.523	-2.170	1.00	57.87	A	C
ATOM	2298	CE	LYS	471	17.031	13.298	-2.797	1.00	58.73	A	C
ATOM	2299	NZ	LYS	471	15.776	13.600	-3.563	1.00	56.86	A	N
ATOM	2300	C	LYS	471	17.558	17.437	1.874	1.00	51.32	A	C
ATOM	2301	O	LYS	471	17.539	16.803	2.931	1.00	51.44	A	O
ATOM	2302	N	VAL	472	18.274	18.543	1.688	1.00	48.87	A	N
ATOM	2303	CA	VAL	472	19.181	19.094	2.682	1.00	45.33	A	C
ATOM	2304	CB	VAL	472	20.116	20.125	2.032	1.00	44.44	A	C
ATOM	2305	CG1	VAL	472	21.091	20.685	3.048	1.00	44.70	A	C
ATOM	2306	CG2	VAL	472	20.866	19.484	0.889	1.00	43.91	A	C
ATOM	2307	C	VAL	472	18.526	19.708	3.911	1.00	44.52	A	C
ATOM	2308	O	VAL	472	19.006	19.503	5.015	1.00	45.36	A	O
ATOM	2309	N	ARG	473	17.440	20.449	3.737	1.00	43.51	A	N
ATOM	2310	CA	ARG	473	16.773	21.082	4.875	1.00	43.39	A	C
ATOM	2311	CB	ARG	473	15.515	21.819	4.427	1.00	44.24	A	C
ATOM	2312	CG	ARG	473	15.781	22.986	3.508	1.00	44.72	A	C
ATOM	2313	CD	ARG	473	14.497	23.494	2.901	1.00	45.49	A	C
ATOM	2314	NE	ARG	473	14.759	24.621	2.023	1.00	46.55	A	N
ATOM	2315	CZ	ARG	473	14.517	25.885	2.344	1.00	47.62	A	C
ATOM	2316	NH1	ARG	473	13.994	26.189	3.527	1.00	47.93	A	N
ATOM	2317	NH2	ARG	473	14.834	26.848	1.493	1.00	48.78	A	N
ATOM	2318	C	ARG	473	16.409	20.094	5.972	1.00	43.32	A	C
ATOM	2319	O	ARG	473	16.750	20.298	7.137	1.00	44.07	A	O
ATOM	2320	N	GLN	474	15.735	19.014	5.586	1.00	42.79	A	N
ATOM	2321	CA	GLN	474	15.309	17.973	6.522	1.00	41.35	A	C
ATOM	2322	CB	GLN	474	14.601	16.846	5.760	1.00	41.35	A	C
ATOM	2323	CG	GLN	474	13.920	17.308	4.478	1.00	42.10	A	C
ATOM	2324	CD	GLN	474	12.485	16.845	4.363	1.00	42.73	A	C
ATOM	2325	OE1	GLN	474	12.062	16.358	3.314	1.00	43.39	A	O
ATOM	2326	NE2	GLN	474	11.719	17.015	5.435	1.00	42.48	A	N
ATOM	2327	C	GLN	474	16.513	17.412	7.274	1.00	39.89	A	C
ATOM	2328	O	GLN	474	16.527	17.341	8.502	1.00	39.33	A	O
ATOM	2329	N	ARG	475	17.536	17.048	6.509	1.00	38.79	A	N
ATOM	2330	CA	ARG	475	18.767	16.498	7.047	1.00	37.19	A	C
ATOM	2331	CB	ARG	475	19.814	16.376	5.927	1.00	36.31	A	C
ATOM	2332	CG	ARG	475	20.992	15.463	6.239	1.00	36.81	A	C
ATOM	2333	CD	ARG	475	21.845	15.186	5.008	1.00	36.31	A	C
ATOM	2334	NE	ARG	475	22.601	16.357	4.569	1.00	36.54	A	N
ATOM	2335	CZ	ARG	475	23.096	16.516	3.343	1.00	35.74	A	C
ATOM	2336	NH1	ARG	475	22.915	15.574	2.419	1.00	33.87	A	N
ATOM	2337	NH2	ARG	475	23.787	17.613	3.046	1.00	34.00	A	N
ATOM	2338	C	ARG	475	19.260	17.431	8.136	1.00	35.46	A	C
ATOM	2339	O	ARG	475	19.344	17.042	9.289	1.00	36.18	A	O
ATOM	2340	N	ALA	476	19.450	18.694	7.781	1.00	34.17	A	N
ATOM	2341	CA	ALA	476	19.946	19.689	8.716	1.00	33.05	A	C
ATOM	2342	CB	ALA	476	20.218	20.986	8.000	1.00	32.98	A	C
ATOM	2343	C	ALA	476	19.048	19.922	9.915	1.00	32.68	A	C
ATOM	2344	O	ALA	476	19.543	20.196	11.010	1.00	32.91	A	O
ATOM	2345	N	VAL	477	17.735	19.843	9.713	1.00	31.85	A	N
ATOM	2346	CA	VAL	477	16.799	20.041	10.817	1.00	31.41	A	C
ATOM	2347	CB	VAL	477	15.332	20.204	10.339	1.00	29.99	A	C

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ATOM	2348	CG1	VAL	477	14.368	20.164	11.526	1.00	27.42	A	C
ATOM	2349	CG2	VAL	477	15.173	21.529	9.616	1.00	29.88	A	C
ATOM	2350	C	VAL	477	16.906	18.864	11.766	1.00	31.90	A	C
ATOM	2351	O	VAL	477	16.924	19.051	12.982	1.00	33.89	A	O
ATOM	2352	N	ALA	478	17.028	17.663	11.203	1.00	31.31	A	N
ATOM	2353	CA	ALA	478	17.148	16.433	11.986	1.00	30.30	A	C
ATOM	2354	CB	ALA	478	17.046	15.222	11.075	1.00	30.39	A	C
ATOM	2355	C	ALA	478	18.449	16.387	12.787	1.00	29.60	A	C
ATOM	2356	O	ALA	478	18.448	15.994	13.952	1.00	30.24	A	O
ATOM	2357	N	LEU	479	19.551	16.793	12.161	1.00	29.16	A	N
ATOM	2358	CA	LEU	479	20.867	16.816	12.810	1.00	28.98	A	C
ATOM	2359	CB	LEU	479	21.957	17.143	11.784	1.00	27.44	A	C
ATOM	2360	CG	LEU	479	23.410	17.206	12.252	1.00	26.73	A	C
ATOM	2361	CD1	LEU	479	23.756	16.049	13.172	1.00	24.73	A	C
ATOM	2362	CD2	LEU	479	24.299	17.212	11.029	1.00	28.23	A	C
ATOM	2363	C	LEU	479	20.881	17.830	13.955	1.00	29.04	A	C
ATOM	2364	O	LEU	479	21.597	17.674	14.939	1.00	29.47	A	O
ATOM	2365	N	TYR	480	20.090	18.879	13.798	1.00	29.36	A	N
ATOM	2366	CA	TYR	480	19.956	19.904	14.805	1.00	29.31	A	C
ATOM	2367	CB	TYR	480	19.046	21.005	14.277	1.00	29.44	A	C
ATOM	2368	CG	TYR	480	18.472	21.903	15.341	1.00	28.98	A	C
ATOM	2369	CD1	TYR	480	19.296	22.719	16.117	1.00	28.48	A	C
ATOM	2370	CE1	TYR	480	18.757	23.587	17.058	1.00	29.07	A	C
ATOM	2371	CD2	TYR	480	17.096	21.973	15.538	1.00	27.35	A	C
ATOM	2372	CE2	TYR	480	16.547	22.837	16.475	1.00	27.42	A	C
ATOM	2373	CZ	TYR	480	17.378	23.643	17.229	1.00	28.30	A	C
ATOM	2374	OH	TYR	480	16.828	24.516	18.136	1.00	28.64	A	O
ATOM	2375	C	TYR	480	19.308	19.230	15.995	1.00	29.94	A	C
ATOM	2376	O	TYR	480	19.812	19.307	17.108	1.00	31.03	A	O
ATOM	2377	N	PHE	481	18.192	18.553	15.732	1.00	31.01	A	N
ATOM	2378	CA	PHE	481	17.417	17.827	16.747	1.00	31.45	A	C
ATOM	2379	CB	PHE	481	16.286	17.027	16.078	1.00	31.31	A	C
ATOM	2380	CG	PHE	481	15.070	17.843	15.743	1.00	29.66	A	C
ATOM	2381	CD1	PHE	481	14.991	19.179	16.096	1.00	28.94	A	C
ATOM	2382	CD2	PHE	481	13.992	17.257	15.100	1.00	29.76	A	C
ATOM	2383	CE1	PHE	481	13.863	19.916	15.818	1.00	29.10	A	C
ATOM	2384	CE2	PHE	481	12.857	17.988	14.818	1.00	29.99	A	C
ATOM	2385	CZ	PHE	481	12.793	19.321	15.178	1.00	30.22	A	C
ATOM	2386	C	PHE	481	18.275	16.866	17.562	1.00	31.53	A	C
ATOM	2387	O	PHE	481	18.212	16.850	18.794	1.00	31.21	A	O
ATOM	2388	N	ILE	482	19.046	16.045	16.852	1.00	30.91	A	N
ATOM	2389	CA	ILE	482	19.933	15.068	17.463	1.00	30.00	A	C
ATOM	2390	CB	ILE	482	20.680	14.249	16.393	1.00	29.55	A	C
ATOM	2391	CG2	ILE	482	21.696	13.339	17.053	1.00	29.17	A	C
ATOM	2392	CG1	ILE	482	19.694	13.468	15.518	1.00	28.78	A	C
ATOM	2393	CD1	ILE	482	20.359	12.699	14.401	1.00	26.94	A	C
ATOM	2394	C	ILE	482	20.982	15.773	18.300	1.00	30.40	A	C
ATOM	2395	O	ILE	482	21.360	15.293	19.364	1.00	32.42	A	O
ATOM	2396	N	ASP	483	21.465	16.906	17.810	1.00	29.94	A	N
ATOM	2397	CA	ASP	483	22.493	17.642	18.518	1.00	30.27	A	C
ATOM	2398	CB	ASP	483	23.201	18.620	17.576	1.00	31.19	A	C
ATOM	2399	CG	ASP	483	24.413	19.276	18.216	1.00	32.86	A	C
ATOM	2400	OD1	ASP	483	25.055	18.622	19.069	1.00	35.23	A	O
ATOM	2401	OD2	ASP	483	24.730	20.436	17.870	1.00	31.47	A	O
ATOM	2402	C	ASP	483	21.966	18.369	19.745	1.00	29.71	A	C
ATOM	2403	O	ASP	483	22.421	18.123	20.862	1.00	29.35	A	O
ATOM	2404	N	LYS	484	20.971	19.220	19.540	1.00	29.80	A	N
ATOM	2405	CA	LYS	484	20.406	19.999	20.627	1.00	30.78	A	C
ATOM	2406	CB	LYS	484	19.627	21.189	20.068	1.00	32.28	A	C
ATOM	2407	CG	LYS	484	19.257	22.206	21.124	1.00	35.46	A	C
ATOM	2408	CD	LYS	484	18.461	23.375	20.566	1.00	38.80	A	C
ATOM	2409	CE	LYS	484	18.232	24.428	21.645	1.00	40.50	A	C
ATOM	2410	NZ	LYS	484	17.595	23.822	22.862	1.00	41.87	A	N

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ATOM	2411	C	LYS	484	19.534	19.224	21.612	1.00	30.18	A	C
ATOM	2412	O	LYS	484	19.541	19.523	22.806	1.00	30.16	A	O
ATOM	2413	N	LEU	485	18.812	18.220	21.118	1.00	30.08	A	N
ATOM	2414	CA	LEU	485	17.913	17.418	21.949	1.00	29.25	A	C
ATOM	2415	CB	LEU	485	16.538	17.335	21.281	1.00	30.34	A	C
ATOM	2416	CG	LEU	485	15.708	18.604	20.918	1.00	31.35	A	C
ATOM	2417	CD1	LEU	485	14.681	18.250	19.926	1.00	32.02	A	C
ATOM	2418	CD2	LEU	485	15.176	19.247	22.157	1.00	31.06	A	C
ATOM	2419	C	LEU	485	18.378	15.991	22.260	1.00	28.33	A	C
ATOM	2420	O	LEU	485	17.654	15.245	22.903	1.00	28.88	A	O
ATOM	2421	N	ALA	486	19.555	15.604	21.773	1.00	28.00	A	N
ATOM	2422	CA	ALA	486	20.121	14.260	21.985	1.00	27.24	A	C
ATOM	2423	CB	ALA	486	20.064	13.856	23.452	1.00	27.97	A	C
ATOM	2424	C	ALA	486	19.532	13.151	21.122	1.00	26.44	A	C
ATOM	2425	O	ALA	486	20.273	12.300	20.649	1.00	26.11	A	O
ATOM	2426	N	LEU	487	18.212	13.179	20.917	1.00	26.53	A	N
ATOM	2427	CA	LEU	487	17.459	12.186	20.117	1.00	26.72	A	C
ATOM	2428	CB	LEU	487	16.495	12.882	19.142	1.00	27.30	A	C
ATOM	2429	CG	LEU	487	15.402	13.806	19.691	1.00	28.67	A	C
ATOM	2430	CD1	LEU	487	14.442	14.164	18.574	1.00	27.63	A	C
ATOM	2431	CD2	LEU	487	14.643	13.131	20.824	1.00	30.26	A	C
ATOM	2432	C	LEU	487	18.230	11.108	19.344	1.00	25.02	A	C
ATOM	2433	O	LEU	487	19.092	11.412	18.518	1.00	25.02	A	O
ATOM	2434	N	ARG	488	17.872	9.851	19.594	1.00	23.09	A	N
ATOM	2435	CA	ARG	488	18.498	8.708	18.937	1.00	22.34	A	C
ATOM	2436	CB	ARG	488	17.967	7.391	19.505	1.00	20.53	A	C
ATOM	2437	CG	ARG	488	18.043	7.307	20.994	1.00	16.96	A	C
ATOM	2438	CD	ARG	488	17.896	5.907	21.483	1.00	15.78	A	C
ATOM	2439	NE	ARG	488	17.997	5.887	22.931	1.00	17.57	A	N
ATOM	2440	CZ	ARG	488	17.034	6.302	23.748	1.00	19.63	A	C
ATOM	2441	NH1	ARG	488	15.888	6.756	23.254	1.00	19.31	A	N
ATOM	2442	NH2	ARG	488	17.229	6.302	25.062	1.00	20.72	A	N
ATOM	2443	C	ARG	488	18.192	8.752	17.461	1.00	22.69	A	C
ATOM	2444	O	ARG	488	17.150	9.268	17.064	1.00	23.17	A	O
ATOM	2445	N	ALA	489	19.082	8.170	16.662	1.00	23.19	A	N
ATOM	2446	CA	ALA	489	18.928	8.151	15.214	1.00	22.84	A	C
ATOM	2447	CB	ALA	489	19.822	7.091	14.611	1.00	24.15	A	C
ATOM	2448	C	ALA	489	17.477	7.912	14.833	1.00	22.47	A	C
ATOM	2449	O	ALA	489	16.753	8.859	14.531	1.00	21.66	A	O
ATOM	2450	N	GLY	490	17.037	6.661	14.912	1.00	22.25	A	N
ATOM	2451	CA	GLY	490	15.660	6.354	14.580	1.00	22.71	A	C
ATOM	2452	C	GLY	490	15.460	5.405	13.421	1.00	22.81	A	C
ATOM	2453	O	GLY	490	14.702	5.692	12.503	1.00	22.56	A	O
ATOM	2454	N	ASN	491	16.124	4.263	13.465	1.00	24.29	A	N
ATOM	2455	CA	ASN	491	15.984	3.281	12.410	1.00	27.17	A	C
ATOM	2456	CB	ASN	491	16.895	2.103	12.678	1.00	26.19	A	C
ATOM	2457	CG	ASN	491	18.329	2.428	12.406	1.00	25.92	A	C
ATOM	2458	OD1	ASN	491	19.038	2.943	13.267	1.00	26.90	A	O
ATOM	2459	ND2	ASN	491	18.765	2.160	11.186	1.00	25.84	A	N
ATOM	2460	C	ASN	491	14.547	2.809	12.237	1.00	30.19	A	C
ATOM	2461	O	ASN	491	13.782	2.716	13.200	1.00	30.55	A	O
ATOM	2462	N	GLU	492	14.193	2.548	10.986	1.00	33.20	A	N
ATOM	2463	CA	GLU	492	12.867	2.095	10.605	1.00	37.58	A	C
ATOM	2464	CB	GLU	492	12.638	2.378	9.113	1.00	41.12	A	C
ATOM	2465	CG	GLU	492	13.819	2.001	8.170	1.00	47.92	A	C
ATOM	2466	CD	GLU	492	15.080	2.877	8.342	1.00	50.02	A	C
ATOM	2467	OE1	GLU	492	15.036	4.085	8.006	1.00	51.92	A	O
ATOM	2468	OE2	GLU	492	16.120	2.345	8.803	1.00	50.47	A	O
ATOM	2469	C	GLU	492	12.671	0.613	10.941	1.00	37.83	A	C
ATOM	2470	O	GLU	492	13.422	-0.244	10.478	1.00	38.01	A	O
ATOM	2471	N	LYS	493	11.656	0.333	11.758	1.00	38.15	A	N
ATOM	2472	CA	LYS	493	11.342	-1.018	12.215	1.00	38.75	A	C
ATOM	2473	CB	LYS	493	10.952	-0.984	13.693	1.00	37.58	A	C

ATOM	2474	CG	LYS	493	11.639	0.082	14.517	1.00	36.25	A	C
ATOM	2475	CD	LYS	493	10.690	0.661	15.556	1.00	35.70	A	C
ATOM	2476	CE	LYS	493	11.225	0.514	16.971	1.00	35.98	A	C
ATOM	2477	NZ	LYS	493	10.951	-0.830	17.565	1.00	36.81	A	N
ATOM	2478	C	LYS	493	10.167	-1.615	11.464	1.00	40.34	A	C
ATOM	2479	O	LYS	493	9.372	-0.807	10.871	1.00	41.10	A	O
ATOM	2480	N	GLU	494	10.022	-2.936	11.567	1.00	42.06	A	N
ATOM	2481	CA	GLU	494	8.916	-3.656	10.937	1.00	44.05	A	C
ATOM	2482	CB	GLU	494	9.223	-5.157	10.875	1.00	44.21	A	C
ATOM	2483	CG	GLU	494	10.513	-5.514	10.139	1.00	45.14	A	C
ATOM	2484	CD	GLU	494	10.928	-6.976	10.306	1.00	45.70	A	C
ATOM	2485	OE1	GLU	494	10.082	-7.817	10.687	1.00	46.51	A	O
ATOM	2486	OE2	GLU	494	12.111	-7.284	10.052	1.00	45.20	A	O
ATOM	2487	C	GLU	494	7.648	-3.428	11.774	1.00	45.69	A	C
ATOM	2488	O	GLU	494	7.709	-3.377	13.006	1.00	46.66	A	O
ATOM	2489	N	GLU	495	6.511	-3.264	11.106	1.00	46.57	A	N
ATOM	2490	CA	GLU	495	5.240	-3.047	11.788	1.00	47.57	A	C
ATOM	2491	CB	GLU	495	4.200	-2.529	10.794	1.00	49.65	A	C
ATOM	2492	CG	GLU	495	3.957	-3.466	9.603	1.00	52.72	A	C
ATOM	2493	CD	GLU	495	3.080	-2.855	8.513	1.00	54.99	A	C
ATOM	2494	OE1	GLU	495	1.904	-2.512	8.789	1.00	55.43	A	O
ATOM	2495	OE2	GLU	495	3.569	-2.729	7.370	1.00	56.54	A	O
ATOM	2496	C	GLU	495	4.758	-4.358	12.396	1.00	47.83	A	C
ATOM	2497	O	GLU	495	4.907	-5.418	11.792	1.00	48.21	A	O
ATOM	2498	N	GLY	496	4.221	-4.291	13.609	1.00	48.07	A	N
ATOM	2499	CA	GLY	496	3.711	-5.488	14.265	1.00	47.08	A	C
ATOM	2500	C	GLY	496	4.705	-6.508	14.807	1.00	46.07	A	C
ATOM	2501	O	GLY	496	4.299	-7.546	15.340	1.00	46.66	A	O
ATOM	2502	N	GLU	497	5.997	-6.229	14.688	1.00	44.49	A	N
ATOM	2503	CA	GLU	497	7.002	-7.151	15.192	1.00	43.52	A	C
ATOM	2504	CB	GLU	497	7.943	-7.573	14.059	1.00	45.48	A	C
ATOM	2505	CG	GLU	497	7.249	-8.348	12.907	1.00	49.08	A	C
ATOM	2506	CD	GLU	497	6.788	-9.777	13.281	1.00	51.38	A	C
ATOM	2507	OE1	GLU	497	7.635	-10.602	13.698	1.00	51.68	A	O
ATOM	2508	OE2	GLU	497	5.581	-10.088	13.119	1.00	52.42	A	O
ATOM	2509	C	GLU	497	7.770	-6.596	16.404	1.00	41.69	A	C
ATOM	2510	O	GLU	497	8.670	-7.244	16.938	1.00	41.88	A	O
ATOM	2511	N	THR	498	7.376	-5.409	16.854	1.00	38.95	A	N
ATOM	2512	CA	THR	498	7.974	-4.744	18.014	1.00	35.76	A	C
ATOM	2513	CB	THR	498	9.480	-4.392	17.787	1.00	36.02	A	C
ATOM	2514	OG1	THR	498	9.867	-3.328	18.667	1.00	35.09	A	O
ATOM	2515	CG2	THR	498	9.754	-3.975	16.337	1.00	37.84	A	C
ATOM	2516	C	THR	498	7.170	-3.482	18.363	1.00	34.08	A	C
ATOM	2517	O	THR	498	6.697	-2.770	17.470	1.00	33.14	A	O
ATOM	2518	N	ALA	499	7.023	-3.221	19.663	1.00	31.51	A	N
ATOM	2519	CA	ALA	499	6.276	-2.069	20.178	1.00	30.03	A	C
ATOM	2520	CB	ALA	499	6.623	-1.819	21.637	1.00	29.94	A	C
ATOM	2521	C	ALA	499	6.493	-0.800	19.376	1.00	30.25	A	C
ATOM	2522	O	ALA	499	7.610	-0.509	18.948	1.00	29.60	A	O
ATOM	2523	N	ASP	500	5.415	-0.047	19.171	1.00	31.46	A	N
ATOM	2524	CA	ASP	500	5.492	1.181	18.397	1.00	31.32	A	C
ATOM	2525	CB	ASP	500	4.088	1.662	17.994	1.00	33.80	A	C
ATOM	2526	CG	ASP	500	4.093	3.008	17.225	1.00	35.71	A	C
ATOM	2527	OD1	ASP	500	5.159	3.474	16.744	1.00	35.69	A	O
ATOM	2528	OD2	ASP	500	3.000	3.606	17.111	1.00	36.75	A	O
ATOM	2529	C	ASP	500	6.240	2.268	19.141	1.00	30.19	A	C
ATOM	2530	O	ASP	500	5.728	2.836	20.109	1.00	30.22	A	O
ATOM	2531	N	THR	501	7.460	2.533	18.671	1.00	28.89	A	N
ATOM	2532	CA	THR	501	8.337	3.571	19.221	1.00	27.90	A	C
ATOM	2533	CB	THR	501	9.395	3.001	20.208	1.00	28.05	A	C
ATOM	2534	OG1	THR	501	10.247	2.073	19.519	1.00	29.05	A	O
ATOM	2535	CG2	THR	501	8.732	2.327	21.418	1.00	25.00	A	C
ATOM	2536	C	THR	501	9.062	4.254	18.050	1.00	27.10	A	C

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ATOM	2537	O	THR	501	9.222	3.660	16.977	1.00	25.43	A	O
ATOM	2538	N	VAL	502	9.519	5.485	18.267	1.00	26.99	A	N
ATOM	2539	CA	VAL	502	10.193	6.236	17.214	1.00	28.12	A	C
ATOM	2540	CB	VAL	502	9.229	7.264	16.588	1.00	28.07	A	C
ATOM	2541	CG1	VAL	502	7.978	6.581	16.087	1.00	29.15	A	C
ATOM	2542	CG2	VAL	502	8.867	8.334	17.604	1.00	28.60	A	C
ATOM	2543	C	VAL	502	11.459	6.993	17.623	1.00	29.07	A	C
ATOM	2544	O	VAL	502	11.785	7.114	18.802	1.00	28.66	A	O
ATOM	2545	N	GLY	503	12.140	7.525	16.611	1.00	31.19	A	N
ATOM	2546	CA	GLY	503	13.351	8.308	16.795	1.00	34.53	A	C
ATOM	2547	C	GLY	503	13.306	9.487	15.828	1.00	37.13	A	C
ATOM	2548	O	GLY	503	12.381	9.576	15.005	1.00	37.98	A	O
ATOM	2549	N	CYS	504	14.294	10.382	15.910	1.00	37.97	A	N
ATOM	2550	CA	CYS	504	14.371	11.572	15.050	1.00	38.13	A	C
ATOM	2551	CB	CYS	504	15.733	12.250	15.213	1.00	41.04	A	C
ATOM	2552	SG	CYS	504	16.418	12.939	13.669	1.00	46.31	A	S
ATOM	2553	C	CYS	504	14.071	11.389	13.554	1.00	37.14	A	C
ATOM	2554	O	CYS	504	13.307	12.160	12.985	1.00	37.26	A	O
ATOM	2555	N	CYS	505	14.689	10.401	12.914	1.00	35.43	A	N
ATOM	2556	CA	CYS	505	14.463	10.162	11.491	1.00	34.84	A	C
ATOM	2557	CB	CYS	505	15.596	9.338	10.891	1.00	35.55	A	C
ATOM	2558	SG	CYS	505	17.124	10.253	10.713	1.00	40.19	A	S
ATOM	2559	C	CYS	505	13.140	9.487	11.182	1.00	33.92	A	C
ATOM	2560	O	CYS	505	12.584	9.674	10.104	1.00	35.44	A	O
ATOM	2561	N	SER	506	12.638	8.695	12.123	1.00	32.55	A	N
ATOM	2562	CA	SER	506	11.373	7.987	11.933	1.00	30.15	A	C
ATOM	2563	CB	SER	506	11.452	6.576	12.522	1.00	30.05	A	C
ATOM	2564	OG	SER	506	11.584	6.617	13.933	1.00	29.58	A	O
ATOM	2565	C	SER	506	10.215	8.733	12.572	1.00	28.37	A	C
ATOM	2566	O	SER	506	9.201	8.123	12.904	1.00	27.67	A	O
ATOM	2567	N	LEU	507	10.380	10.042	12.756	1.00	26.49	A	N
ATOM	2568	CA	LEU	507	9.350	10.892	13.360	1.00	25.62	A	C
ATOM	2569	CB	LEU	507	9.856	12.329	13.513	1.00	24.14	A	C
ATOM	2570	CG	LEU	507	10.484	12.706	14.851	1.00	23.84	A	C
ATOM	2571	CD1	LEU	507	11.069	14.090	14.750	1.00	25.35	A	C
ATOM	2572	CD2	LEU	507	9.456	12.636	15.968	1.00	22.00	A	C
ATOM	2573	C	LEU	507	8.077	10.913	12.540	1.00	24.31	A	C
ATOM	2574	O	LEU	507	8.134	10.821	11.322	1.00	24.80	A	O
ATOM	2575	N	ARG	508	6.935	11.033	13.209	1.00	23.74	A	N
ATOM	2576	CA	ARG	508	5.654	11.081	12.511	1.00	25.70	A	C
ATOM	2577	CB	ARG	508	4.724	9.976	12.987	1.00	25.84	A	C
ATOM	2578	CG	ARG	508	5.172	8.601	12.599	1.00	25.55	A	C
ATOM	2579	CD	ARG	508	4.127	7.597	12.977	1.00	26.14	A	C
ATOM	2580	NE	ARG	508	4.735	6.296	13.182	1.00	29.27	A	N
ATOM	2581	CZ	ARG	508	4.319	5.422	14.087	1.00	31.69	A	C
ATOM	2582	NH1	ARG	508	3.277	5.714	14.862	1.00	32.58	A	N
ATOM	2583	NH2	ARG	508	4.992	4.291	14.261	1.00	32.50	A	N
ATOM	2584	C	ARG	508	4.976	12.423	12.688	1.00	25.50	A	C
ATOM	2585	O	ARG	508	5.185	13.087	13.688	1.00	25.93	A	O
ATOM	2586	N	VAL	509	4.148	12.809	11.724	1.00	26.28	A	N
ATOM	2587	CA	VAL	509	3.455	14.093	11.783	1.00	27.65	A	C
ATOM	2588	CB	VAL	509	2.563	14.305	10.524	1.00	26.82	A	C
ATOM	2589	CG1	VAL	509	1.701	15.530	10.665	1.00	25.03	A	C
ATOM	2590	CG2	VAL	509	3.440	14.451	9.299	1.00	26.13	A	C
ATOM	2591	C	VAL	509	2.658	14.228	13.085	1.00	28.73	A	C
ATOM	2592	O	VAL	509	2.560	15.319	13.659	1.00	29.49	A	O
ATOM	2593	N	GLU	510	2.162	13.103	13.591	1.00	28.33	A	N
ATOM	2594	CA	GLU	510	1.405	13.108	14.833	1.00	28.30	A	C
ATOM	2595	CB	GLU	510	0.639	11.786	14.975	1.00	28.12	A	C
ATOM	2596	CG	GLU	510	1.520	10.538	14.991	1.00	29.10	A	C
ATOM	2597	CD	GLU	510	0.737	9.224	14.865	1.00	31.77	A	C
ATOM	2598	OE1	GLU	510	-0.474	9.177	15.192	1.00	31.04	A	O
ATOM	2599	OE2	GLU	510	1.348	8.220	14.432	1.00	32.78	A	O

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ATOM	2600	C	GLU	510	2.286	13.347	16.079	1.00	28.36	A	C
ATOM	2601	O	GLU	510	1.768	13.637	17.159	1.00	29.35	A	O
ATOM	2602	N	HIS	511	3.609	13.281	15.918	1.00	26.90	A	N
ATOM	2603	CA	HIS	511	4.535	13.431	17.043	1.00	25.33	A	C
ATOM	2604	CB	HIS	511	5.713	12.480	16.892	1.00	21.23	A	C
ATOM	2605	CG	HIS	511	5.323	11.043	16.928	1.00	16.59	A	C
ATOM	2606	CD2	HIS	511	4.476	10.371	17.739	1.00	14.42	A	C
ATOM	2607	ND1	HIS	511	5.818	10.117	16.039	1.00	15.59	A	N
ATOM	2608	CE1	HIS	511	5.293	8.934	16.301	1.00	13.38	A	C
ATOM	2609	NE2	HIS	511	4.475	9.062	17.327	1.00	14.37	A	N
ATOM	2610	C	HIS	511	5.047	14.811	17.379	1.00	27.52	A	C
ATOM	2611	O	HIS	511	5.876	14.966	18.274	1.00	26.71	A	O
ATOM	2612	N	ILE	512	4.576	15.811	16.650	1.00	31.45	A	N
ATOM	2613	CA	ILE	512	4.974	17.190	16.908	1.00	35.58	A	C
ATOM	2614	CB	ILE	512	6.149	17.642	16.015	1.00	35.37	A	C
ATOM	2615	CG2	ILE	512	7.402	16.922	16.408	1.00	35.22	A	C
ATOM	2616	CG1	ILE	512	5.830	17.394	14.543	1.00	37.40	A	C
ATOM	2617	CD1	ILE	512	6.915	17.865	13.592	1.00	39.53	A	C
ATOM	2618	C	ILE	512	3.809	18.153	16.707	1.00	37.75	A	C
ATOM	2619	O	ILE	512	2.942	17.938	15.854	1.00	38.56	A	O
ATOM	2620	N	ASN	513	3.772	19.195	17.530	1.00	40.41	A	N
ATOM	2621	CA	ASN	513	2.733	20.208	17.421	1.00	41.91	A	C
ATOM	2622	CB	ASN	513	1.709	20.086	18.545	1.00	42.70	A	C
ATOM	2623	CG	ASN	513	0.557	19.204	18.159	1.00	44.13	A	C
ATOM	2624	OD1	ASN	513	-0.238	19.561	17.295	1.00	45.22	A	O
ATOM	2625	ND2	ASN	513	0.487	18.020	18.752	1.00	45.47	A	N
ATOM	2626	C	ASN	513	3.327	21.595	17.384	1.00	41.85	A	C
ATOM	2627	O	ASN	513	3.825	22.097	18.391	1.00	42.65	A	O
ATOM	2628	N	LEU	514	3.301	22.189	16.196	1.00	41.57	A	N
ATOM	2629	CA	LEU	514	3.827	23.525	15.985	1.00	41.50	A	C
ATOM	2630	CB	LEU	514	3.975	23.795	14.489	1.00	39.05	A	C
ATOM	2631	CG	LEU	514	4.998	22.847	13.870	1.00	38.12	A	C
ATOM	2632	CD1	LEU	514	4.910	22.835	12.375	1.00	38.12	A	C
ATOM	2633	CD2	LEU	514	6.378	23.249	14.332	1.00	37.88	A	C
ATOM	2634	C	LEU	514	2.940	24.571	16.635	1.00	42.27	A	C
ATOM	2635	O	LEU	514	1.717	24.476	16.598	1.00	42.51	A	O
ATOM	2636	N	HIS	515	3.578	25.521	17.303	1.00	44.19	A	N
ATOM	2637	CA	HIS	515	2.889	26.619	17.963	1.00	46.86	A	C
ATOM	2638	CB	HIS	515	2.870	26.419	19.483	1.00	46.53	A	C
ATOM	2639	CG	HIS	515	1.899	25.379	19.944	1.00	46.14	A	C
ATOM	2640	CD2	HIS	515	0.851	24.796	19.316	1.00	46.29	A	C
ATOM	2641	ND1	HIS	515	1.955	24.814	21.199	1.00	46.00	A	N
ATOM	2642	CE1	HIS	515	0.987	23.925	21.323	1.00	46.48	A	C
ATOM	2643	NE2	HIS	515	0.302	23.895	20.194	1.00	46.79	A	N
ATOM	2644	C	HIS	515	3.649	27.894	17.614	1.00	48.94	A	C
ATOM	2645	O	HIS	515	4.863	27.975	17.822	1.00	48.49	A	O
ATOM	2646	N	PRO	516	2.962	28.879	17.006	1.00	51.11	A	N
ATOM	2647	CD	PRO	516	1.628	28.822	16.383	1.00	51.53	A	C
ATOM	2648	CA	PRO	516	3.641	30.126	16.649	1.00	52.87	A	C
ATOM	2649	CB	PRO	516	2.589	30.861	15.818	1.00	52.41	A	C
ATOM	2650	CG	PRO	516	1.809	29.736	15.196	1.00	52.12	A	C
ATOM	2651	C	PRO	516	4.093	30.928	17.870	1.00	54.74	A	C
ATOM	2652	O	PRO	516	5.159	31.540	17.845	1.00	54.81	A	O
ATOM	2653	N	GLU	517	3.310	30.897	18.946	1.00	57.19	A	N
ATOM	2654	CA	GLU	517	3.688	31.633	20.145	1.00	60.57	A	C
ATOM	2655	CB	GLU	517	2.737	32.798	20.390	1.00	61.88	A	C
ATOM	2656	CG	GLU	517	3.324	33.851	21.311	1.00	63.85	A	C
ATOM	2657	CD	GLU	517	2.266	34.709	21.952	1.00	65.02	A	C
ATOM	2658	OE1	GLU	517	2.097	35.872	21.519	1.00	65.01	A	O
ATOM	2659	OE2	GLU	517	1.605	34.210	22.893	1.00	66.07	A	O
ATOM	2660	C	GLU	517	3.787	30.749	21.388	1.00	62.30	A	C
ATOM	2661	O	GLU	517	4.814	30.106	21.595	1.00	63.73	A	O
ATOM	2662	N	LEU	518	2.750	30.756	22.228	1.00	63.47	A	N



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ATOM	2663	CA	LEU	518	2.690	29.948	23.461	1.00	64.45	A	C
ATOM	2664	CB	LEU	518	2.902	28.456	23.146	1.00	64.70	A	C
ATOM	2665	CG	LEU	518	2.789	27.453	24.302	1.00	64.31	A	C
ATOM	2666	CD1	LEU	518	1.353	27.412	24.810	1.00	64.64	A	C
ATOM	2667	CD2	LEU	518	3.225	26.069	23.842	1.00	63.21	A	C
ATOM	2668	C	LEU	518	3.603	30.357	24.630	1.00	64.57	A	C
ATOM	2669	O	LEU	518	4.815	30.511	24.469	1.00	63.90	A	O
ATOM	2670	N	ASP	519	2.986	30.498	25.806	1.00	65.25	A	N
ATOM	2671	CA	ASP	519	3.640	30.855	27.073	1.00	64.92	A	C
ATOM	2672	CB	ASP	519	3.977	29.590	27.867	1.00	64.96	A	C
ATOM	2673	CG	ASP	519	2.769	28.992	28.545	1.00	65.05	A	C
ATOM	2674	OD1	ASP	519	2.614	29.197	29.768	1.00	64.86	A	O
ATOM	2675	OD2	ASP	519	1.980	28.313	27.858	1.00	65.97	A	O
ATOM	2676	C	ASP	519	4.855	31.783	27.070	1.00	64.68	A	C
ATOM	2677	O	ASP	519	5.886	31.459	27.664	1.00	64.06	A	O
ATOM	2678	N	GLY	520	4.721	32.948	26.441	1.00	64.57	A	N
ATOM	2679	CA	GLY	520	5.820	33.900	26.406	1.00	64.78	A	C
ATOM	2680	C	GLY	520	7.086	33.384	25.746	1.00	64.76	A	C
ATOM	2681	O	GLY	520	8.194	33.801	26.108	1.00	64.97	A	O
ATOM	2682	N	GLN	521	6.914	32.455	24.803	1.00	64.44	A	N
ATOM	2683	CA	GLN	521	8.015	31.855	24.044	1.00	63.04	A	C
ATOM	2684	CB	GLN	521	8.239	30.393	24.461	1.00	63.21	A	C
ATOM	2685	CG	GLN	521	8.841	30.198	25.863	1.00	63.21	A	C
ATOM	2686	CD	GLN	521	10.351	30.451	25.930	1.00	64.17	A	C
ATOM	2687	OE1	GLN	521	11.101	29.630	26.462	1.00	63.40	A	O
ATOM	2688	NE2	GLN	521	10.796	31.589	25.403	1.00	65.92	A	N
ATOM	2689	C	GLN	521	7.690	31.951	22.550	1.00	62.03	A	C
ATOM	2690	O	GLN	521	6.524	32.062	22.165	1.00	60.88	A	O
ATOM	2691	N	GLU	522	8.726	31.916	21.716	1.00	61.32	A	N
ATOM	2692	CA	GLU	522	8.553	32.041	20.269	1.00	60.67	A	C
ATOM	2693	CB	GLU	522	9.483	33.134	19.708	1.00	62.53	A	C
ATOM	2694	CG	GLU	522	9.506	34.473	20.463	1.00	64.30	A	C
ATOM	2695	CD	GLU	522	10.263	34.420	21.794	1.00	65.79	A	C
ATOM	2696	OE1	GLU	522	11.008	33.443	22.044	1.00	66.89	A	O
ATOM	2697	OE2	GLU	522	10.107	35.366	22.598	1.00	65.79	A	O
ATOM	2698	C	GLU	522	8.818	30.745	19.506	1.00	58.83	A	C
ATOM	2699	O	GLU	522	9.738	29.994	19.833	1.00	58.75	A	O
ATOM	2700	N	TYR	523	8.014	30.511	18.470	1.00	56.60	A	N
ATOM	2701	CA	TYR	523	8.141	29.336	17.606	1.00	54.09	A	C
ATOM	2702	CB	TYR	523	9.318	29.532	16.663	1.00	55.42	A	C
ATOM	2703	CG	TYR	523	9.326	30.862	15.956	1.00	57.38	A	C
ATOM	2704	CD1	TYR	523	10.108	31.919	16.427	1.00	57.72	A	C
ATOM	2705	CE1	TYR	523	10.158	33.133	15.750	1.00	58.16	A	C
ATOM	2706	CD2	TYR	523	8.587	31.054	14.790	1.00	57.85	A	C
ATOM	2707	CE2	TYR	523	8.632	32.263	14.103	1.00	58.48	A	C
ATOM	2708	CZ	TYR	523	9.418	33.296	14.587	1.00	58.26	A	C
ATOM	2709	OH	TYR	523	9.468	34.483	13.898	1.00	58.02	A	O
ATOM	2710	C	TYR	523	8.314	28.007	18.345	1.00	51.67	A	C
ATOM	2711	O	TYR	523	9.194	27.219	18.006	1.00	50.82	A	O
ATOM	2712	N	VAL	524	7.432	27.739	19.304	1.00	49.08	A	N
ATOM	2713	CA	VAL	524	7.496	26.525	20.112	1.00	45.67	A	C
ATOM	2714	CB	VAL	524	6.706	26.705	21.442	1.00	45.49	A	C
ATOM	2715	CG1	VAL	524	6.400	25.358	22.080	1.00	45.49	A	C
ATOM	2716	CG2	VAL	524	7.524	27.545	22.421	1.00	44.63	A	C
ATOM	2717	C	VAL	524	7.090	25.221	19.426	1.00	43.67	A	C
ATOM	2718	O	VAL	524	6.016	25.115	18.832	1.00	43.54	A	O
ATOM	2719	N	VAL	525	7.978	24.231	19.525	1.00	41.47	A	N
ATOM	2720	CA	VAL	525	7.758	22.896	18.964	1.00	37.55	A	C
ATOM	2721	CB	VAL	525	8.974	22.422	18.136	1.00	36.30	A	C
ATOM	2722	CG1	VAL	525	8.641	21.145	17.403	1.00	36.52	A	C
ATOM	2723	CG2	VAL	525	9.383	23.488	17.147	1.00	35.32	A	C
ATOM	2724	C	VAL	525	7.533	21.956	20.150	1.00	35.15	A	C
ATOM	2725	O	VAL	525	8.424	21.760	20.972	1.00	33.21	A	O

ATOM	2726	N	GLU	526	6.317	21.430	20.259	1.00	33.82	A	N
ATOM	2727	CA	GLU	526	5.936	20.534	21.350	1.00	32.47	A	C
ATOM	2728	CB	GLU	526	4.536	20.910	21.852	1.00	34.03	A	C
ATOM	2729	CG	GLU	526	3.937	19.965	22.883	1.00	36.16	A	C
ATOM	2730	CD	GLU	526	2.468	20.250	23.133	1.00	37.66	A	C
ATOM	2731	OE1	GLU	526	2.129	20.755	24.222	1.00	37.97	A	O
ATOM	2732	OE2	GLU	526	1.648	19.972	22.233	1.00	39.86	A	O
ATOM	2733	C	GLU	526	5.977	19.057	20.952	1.00	30.52	A	C
ATOM	2734	O	GLU	526	5.021	18.543	20.355	1.00	29.76	A	O
ATOM	2735	N	PHE	527	7.083	18.395	21.319	1.00	28.92	A	N
ATOM	2736	CA	PHE	527	7.348	16.964	21.055	1.00	24.96	A	C
ATOM	2737	CB	PHE	527	8.844	16.670	21.168	1.00	23.98	A	C
ATOM	2738	CG	PHE	527	9.654	17.103	19.995	1.00	21.93	A	C
ATOM	2739	CD1	PHE	527	10.295	18.322	19.998	1.00	20.31	A	C
ATOM	2740	CD2	PHE	527	9.835	16.251	18.912	1.00	22.24	A	C
ATOM	2741	CE1	PHE	527	11.110	18.686	18.936	1.00	22.01	A	C
ATOM	2742	CE2	PHE	527	10.649	16.606	17.846	1.00	21.12	A	C
ATOM	2743	CZ	PHE	527	11.287	17.825	17.858	1.00	21.48	A	C
ATOM	2744	C	PHE	527	6.651	15.998	22.027	1.00	23.85	A	C
ATOM	2745	O	PHE	527	6.660	16.201	23.253	1.00	22.76	A	O
ATOM	2746	N	ASP	528	6.105	14.918	21.473	1.00	21.23	A	N
ATOM	2747	CA	ASP	528	5.438	13.895	22.267	1.00	18.33	A	C
ATOM	2748	CB	ASP	528	3.991	14.272	22.534	1.00	18.50	A	C
ATOM	2749	CG	ASP	528	3.383	13.470	23.667	1.00	20.32	A	C
ATOM	2750	OD1	ASP	528	3.802	12.313	23.887	1.00	21.46	A	O
ATOM	2751	OD2	ASP	528	2.482	13.998	24.350	1.00	22.32	A	O
ATOM	2752	C	ASP	528	5.505	12.557	21.538	1.00	17.34	A	C
ATOM	2753	O	ASP	528	4.901	12.384	20.479	1.00	17.40	A	O
ATOM	2754	N	PHE	529	6.269	11.624	22.098	1.00	14.89	A	N
ATOM	2755	CA	PHE	529	6.423	10.306	21.501	1.00	13.61	A	C
ATOM	2756	CB	PHE	529	7.236	10.394	20.208	1.00	13.79	A	C
ATOM	2757	CG	PHE	529	8.619	10.964	20.395	1.00	15.54	A	C
ATOM	2758	CD1	PHE	529	9.646	10.186	20.923	1.00	15.89	A	C
ATOM	2759	CD2	PHE	529	8.895	12.277	20.053	1.00	15.46	A	C
ATOM	2760	CE1	PHE	529	10.908	10.700	21.108	1.00	14.30	A	C
ATOM	2761	CE2	PHE	529	10.159	12.795	20.237	1.00	15.84	A	C
ATOM	2762	CZ	PHE	529	11.168	12.001	20.766	1.00	15.50	A	C
ATOM	2763	C	PHE	529	7.140	9.390	22.465	1.00	12.76	A	C
ATOM	2764	O	PHE	529	7.866	9.861	23.330	1.00	14.79	A	O
ATOM	2765	N	LEU	530	6.955	8.084	22.292	1.00	10.78	A	N
ATOM	2766	CA	LEU	530	7.612	7.079	23.118	1.00	6.87	A	C
ATOM	2767	CB	LEU	530	6.752	5.823	23.185	1.00	5.91	A	C
ATOM	2768	CG	LEU	530	5.315	5.947	23.676	1.00	4.22	A	C
ATOM	2769	CD1	LEU	530	4.543	4.700	23.310	1.00	2.83	A	C
ATOM	2770	CD2	LEU	530	5.298	6.178	25.170	1.00	4.04	A	C
ATOM	2771	C	LEU	530	8.911	6.738	22.401	1.00	6.32	A	C
ATOM	2772	O	LEU	530	8.901	6.492	21.199	1.00	5.09	A	O
ATOM	2773	N	GLY	531	10.027	6.732	23.120	1.00	7.41	A	N
ATOM	2774	CA	GLY	531	11.296	6.409	22.485	1.00	10.92	A	C
ATOM	2775	C	GLY	531	11.676	4.964	22.740	1.00	13.41	A	C
ATOM	2776	O	GLY	531	10.825	4.083	22.736	1.00	12.64	A	O
ATOM	2777	N	LYS	532	12.960	4.715	22.965	1.00	17.58	A	N
ATOM	2778	CA	LYS	532	13.442	3.360	23.252	1.00	20.18	A	C
ATOM	2779	CB	LYS	532	14.968	3.385	23.415	1.00	19.58	A	C
ATOM	2780	CG	LYS	532	15.636	2.023	23.544	1.00	18.05	A	C
ATOM	2781	CD	LYS	532	17.144	2.181	23.638	1.00	17.48	A	C
ATOM	2782	CE	LYS	532	17.848	0.848	23.675	1.00	17.21	A	C
ATOM	2783	NZ	LYS	532	19.318	1.040	23.513	1.00	19.23	A	N
ATOM	2784	C	LYS	532	12.769	2.852	24.541	1.00	21.41	A	C
ATOM	2785	O	LYS	532	12.391	3.658	25.398	1.00	23.15	A	O
ATOM	2786	N	ASP	533	12.593	1.534	24.652	1.00	21.34	A	N
ATOM	2787	CA	ASP	533	11.960	0.891	25.815	1.00	22.10	A	C
ATOM	2788	CB	ASP	533	12.843	0.936	27.078	1.00	24.72	A	C

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ATOM	2789	CG	ASP	533	14.312	0.623	26.814	1.00	28.61	A	C
ATOM	2790	OD1	ASP	533	14.650	-0.546	26.492	1.00	29.24	A	O
ATOM	2791	OD2	ASP	533	15.135	1.563	26.980	1.00	30.64	A	O
ATOM	2792	C	ASP	533	10.615	1.515	26.164	1.00	20.61	A	C
ATOM	2793	O	ASP	533	10.126	1.368	27.281	1.00	20.70	A	O
ATOM	2794	N	SER	534	10.059	2.264	25.222	1.00	20.50	A	N
ATOM	2795	CA	SER	534	8.777	2.924	25.400	1.00	19.92	A	C
ATOM	2796	CB	SER	534	7.687	1.903	25.758	1.00	21.65	A	C
ATOM	2797	OG	SER	534	7.297	1.141	24.625	1.00	23.94	A	O
ATOM	2798	C	SER	534	8.754	4.081	26.382	1.00	18.77	A	C
ATOM	2799	O	SER	534	7.689	4.488	26.812	1.00	20.24	A	O
ATOM	2800	N	ILE	535	9.911	4.623	26.740	1.00	18.60	A	N
ATOM	2801	CA	ILE	535	9.950	5.769	27.662	1.00	18.06	A	C
ATOM	2802	CB	ILE	535	11.374	6.002	28.241	1.00	17.58	A	C
ATOM	2803	CG2	ILE	535	11.453	7.338	28.968	1.00	17.80	A	C
ATOM	2804	CG1	ILE	535	11.739	4.909	29.236	1.00	16.98	A	C
ATOM	2805	CD1	ILE	535	12.070	3.615	28.620	1.00	15.10	A	C
ATOM	2806	C	ILE	535	9.497	7.054	26.951	1.00	18.68	A	C
ATOM	2807	O	ILE	535	10.124	7.493	25.984	1.00	19.38	A	O
ATOM	2808	N	ARG	536	8.419	7.658	27.440	1.00	19.44	A	N
ATOM	2809	CA	ARG	536	7.880	8.894	26.864	1.00	19.92	A	C
ATOM	2810	CB	ARG	536	6.626	9.305	27.651	1.00	20.99	A	C
ATOM	2811	CG	ARG	536	5.785	10.426	27.044	1.00	21.57	A	C
ATOM	2812	CD	ARG	536	4.632	10.762	27.978	1.00	23.12	A	C
ATOM	2813	NE	ARG	536	3.464	11.327	27.298	1.00	25.18	A	N
ATOM	2814	CZ	ARG	536	2.963	12.540	27.531	1.00	24.81	A	C
ATOM	2815	NH1	ARG	536	3.527	13.340	28.422	1.00	25.04	A	N
ATOM	2816	NH2	ARG	536	1.868	12.940	26.903	1.00	24.37	A	N
ATOM	2817	C	ARG	536	8.877	10.073	26.836	1.00	20.04	A	C
ATOM	2818	O	ARG	536	9.561	10.360	27.824	1.00	18.71	A	O
ATOM	2819	N	TYR	537	8.961	10.736	25.688	1.00	20.65	A	N
ATOM	2820	CA	TYR	537	9.821	11.902	25.511	1.00	23.37	A	C
ATOM	2821	CB	TYR	537	10.740	11.727	24.307	1.00	22.80	A	C
ATOM	2822	CG	TYR	537	11.576	12.942	24.013	1.00	22.84	A	C
ATOM	2823	CD1	TYR	537	11.048	14.019	23.310	1.00	25.61	A	C
ATOM	2824	CE1	TYR	537	11.794	15.166	23.068	1.00	26.27	A	C
ATOM	2825	CD2	TYR	537	12.878	13.037	24.464	1.00	24.20	A	C
ATOM	2826	CE2	TYR	537	13.637	14.183	24.228	1.00	25.59	A	C
ATOM	2827	CZ	TYR	537	13.083	15.243	23.532	1.00	26.15	A	C
ATOM	2828	OH	TYR	537	13.804	16.392	23.321	1.00	27.21	A	O
ATOM	2829	C	TYR	537	8.925	13.122	25.289	1.00	26.18	A	C
ATOM	2830	O	TYR	537	8.370	13.306	24.200	1.00	26.83	A	O
ATOM	2831	N	TYR	538	8.792	13.957	26.315	1.00	28.76	A	N
ATOM	2832	CA	TYR	538	7.956	15.148	26.225	1.00	30.00	A	C
ATOM	2833	CB	TYR	538	6.687	14.987	27.064	1.00	31.67	A	C
ATOM	2834	CG	TYR	538	5.640	16.041	26.768	1.00	33.86	A	C
ATOM	2835	CD1	TYR	538	4.804	15.921	25.660	1.00	33.56	A	C
ATOM	2836	CE1	TYR	538	3.866	16.888	25.362	1.00	34.52	A	C
ATOM	2837	CD2	TYR	538	5.505	17.169	27.577	1.00	34.38	A	C
ATOM	2838	CE2	TYR	538	4.566	18.152	27.288	1.00	35.39	A	C
ATOM	2839	CZ	TYR	538	3.743	18.005	26.177	1.00	36.10	A	C
ATOM	2840	OH	TYR	538	2.783	18.963	25.898	1.00	35.92	A	O
ATOM	2841	C	TYR	538	8.701	16.384	26.683	1.00	30.47	A	C
ATOM	2842	O	TYR	538	9.200	16.438	27.810	1.00	30.66	A	O
ATOM	2843	N	ASN	539	8.707	17.397	25.823	1.00	31.55	A	N
ATOM	2844	CA	ASN	539	9.385	18.661	26.101	1.00	32.06	A	C
ATOM	2845	CB	ASN	539	10.902	18.450	26.019	1.00	33.24	A	C
ATOM	2846	CG	ASN	539	11.681	19.740	26.105	1.00	33.51	A	C
ATOM	2847	OD1	ASN	539	11.333	20.645	26.868	1.00	34.56	A	O
ATOM	2848	ND2	ASN	539	12.747	19.833	25.319	1.00	33.90	A	N
ATOM	2849	C	ASN	539	8.949	19.758	25.128	1.00	31.71	A	C
ATOM	2850	O	ASN	539	8.798	19.519	23.923	1.00	31.32	A	O
ATOM	2851	N	LYS	540	8.719	20.953	25.663	1.00	31.57	A	N

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ATOM	2852	CA	LYS	540	8.312	22.087	24.840	1.00	32.94	A	C
ATOM	2853	CB	LYS	540	7.221	22.911	25.538	1.00	32.19	A	C
ATOM	2854	CG	LYS	540	5.853	22.227	25.555	1.00	32.33	A	C
ATOM	2855	CD	LYS	540	4.823	23.020	26.330	1.00	34.18	A	C
ATOM	2856	CE	LYS	540	5.209	23.175	27.805	1.00	35.33	A	C
ATOM	2857	NZ	LYS	540	5.184	21.883	28.546	1.00	37.96	A	N
ATOM	2858	C	LYS	540	9.545	22.923	24.539	1.00	33.89	A	C
ATOM	2859	O	LYS	540	9.998	23.718	25.368	1.00	34.44	A	O
ATOM	2860	N	VAL	541	10.092	22.726	23.345	1.00	35.03	A	N
ATOM	2861	CA	VAL	541	11.301	23.425	22.950	1.00	36.27	A	C
ATOM	2862	CB	VAL	541	12.413	22.421	22.498	1.00	36.11	A	C
ATOM	2863	CG1	VAL	541	11.991	21.674	21.249	1.00	35.08	A	C
ATOM	2864	CG2	VAL	541	13.743	23.146	22.272	1.00	36.06	A	C
ATOM	2865	C	VAL	541	11.177	24.538	21.915	1.00	37.94	A	C
ATOM	2866	O	VAL	541	10.707	24.325	20.793	1.00	37.97	A	O
ATOM	2867	N	PRO	542	11.541	25.764	22.318	1.00	39.02	A	N
ATOM	2868	CD	PRO	542	11.715	26.133	23.731	1.00	38.32	A	C
ATOM	2869	CA	PRO	542	11.518	26.960	21.474	1.00	40.36	A	C
ATOM	2870	CB	PRO	542	11.808	28.078	22.473	1.00	39.87	A	C
ATOM	2871	CG	PRO	542	11.240	27.546	23.739	1.00	39.45	A	C
ATOM	2872	C	PRO	542	12.678	26.806	20.486	1.00	42.16	A	C
ATOM	2873	O	PRO	542	13.795	26.459	20.883	1.00	42.23	A	O
ATOM	2874	N	VAL	543	12.415	27.056	19.208	1.00	44.20	A	N
ATOM	2875	CA	VAL	543	13.435	26.914	18.168	1.00	45.97	A	C
ATOM	2876	CB	VAL	543	13.065	25.776	17.198	1.00	46.33	A	C
ATOM	2877	CG1	VAL	543	12.792	24.501	17.973	1.00	46.76	A	C
ATOM	2878	CG2	VAL	543	11.844	26.164	16.357	1.00	45.84	A	C
ATOM	2879	C	VAL	543	13.636	28.187	17.348	1.00	47.51	A	C
ATOM	2880	O	VAL	543	12.885	29.157	17.495	1.00	47.65	A	O
ATOM	2881	N	GLU	544	14.649	28.174	16.484	1.00	48.70	A	N
ATOM	2882	CA	GLU	544	14.935	29.317	15.629	1.00	50.28	A	C
ATOM	2883	CB	GLU	544	16.344	29.235	15.049	1.00	50.13	A	C
ATOM	2884	CG	GLU	544	17.430	29.715	15.998	1.00	51.24	A	C
ATOM	2885	CD	GLU	544	18.705	30.095	15.269	1.00	51.40	A	C
ATOM	2886	OE1	GLU	544	19.450	29.181	14.861	1.00	51.04	A	O
ATOM	2887	OE2	GLU	544	18.954	31.310	15.093	1.00	51.91	A	O
ATOM	2888	C	GLU	544	13.924	29.417	14.500	1.00	52.07	A	C
ATOM	2889	O	GLU	544	13.386	28.404	14.050	1.00	52.73	A	O
ATOM	2890	N	LYS	545	13.699	30.648	14.039	1.00	53.91	A	N
ATOM	2891	CA	LYS	545	12.754	30.977	12.963	1.00	54.89	A	C
ATOM	2892	CB	LYS	545	13.010	32.416	12.477	1.00	56.83	A	C
ATOM	2893	CG	LYS	545	11.864	33.081	11.703	1.00	57.56	A	C
ATOM	2894	CD	LYS	545	12.146	34.577	11.534	1.00	58.52	A	C
ATOM	2895	CE	LYS	545	10.886	35.371	11.167	1.00	58.86	A	C
ATOM	2896	NZ	LYS	545	11.041	36.851	11.379	1.00	56.64	A	N
ATOM	2897	C	LYS	545	12.796	30.002	11.782	1.00	54.37	A	C
ATOM	2898	O	LYS	545	11.777	29.396	11.439	1.00	54.17	A	O
ATOM	2899	N	ARG	546	13.970	29.840	11.175	1.00	53.41	A	N
ATOM	2900	CA	ARG	546	14.109	28.930	10.046	1.00	53.42	A	C
ATOM	2901	CB	ARG	546	15.553	28.889	9.560	1.00	54.18	A	C
ATOM	2902	CG	ARG	546	15.807	29.665	8.279	1.00	55.97	A	C
ATOM	2903	CD	ARG	546	14.892	29.231	7.128	1.00	57.11	A	C
ATOM	2904	NE	ARG	546	13.696	30.071	7.007	1.00	59.18	A	N
ATOM	2905	CZ	ARG	546	13.691	31.318	6.532	1.00	60.17	A	C
ATOM	2906	NH1	ARG	546	14.819	31.892	6.121	1.00	60.64	A	N
ATOM	2907	NH2	ARG	546	12.555	32.004	6.487	1.00	59.59	A	N
ATOM	2908	C	ARG	546	13.646	27.515	10.372	1.00	52.86	A	C
ATOM	2909	O	ARG	546	13.005	26.863	9.547	1.00	53.16	A	O
ATOM	2910	N	VAL	547	13.960	27.058	11.582	1.00	51.72	A	N
ATOM	2911	CA	VAL	547	13.591	25.719	12.036	1.00	50.70	A	C
ATOM	2912	CB	VAL	547	14.222	25.403	13.412	1.00	50.63	A	C
ATOM	2913	CG1	VAL	547	13.928	23.971	13.820	1.00	51.03	A	C
ATOM	2914	CG2	VAL	547	15.714	25.620	13.360	1.00	50.88	A	C

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ATOM	2915	C	VAL	547	12.075	25.541	12.118	1.00	49.62	A	C
ATOM	2916	O	VAL	547	11.550	24.474	11.790	1.00	49.02	A	O
ATOM	2917	N	PHE	548	11.377	26.600	12.520	1.00	48.74	A	N
ATOM	2918	CA	PHE	548	9.926	26.558	12.644	1.00	47.56	A	C
ATOM	2919	CB	PHE	548	9.424	27.691	13.533	1.00	44.66	A	C
ATOM	2920	CG	PHE	548	7.995	27.530	13.947	1.00	42.53	A	C
ATOM	2921	CD1	PHE	548	7.677	26.959	15.166	1.00	42.64	A	C
ATOM	2922	CD2	PHE	548	6.965	27.926	13.113	1.00	41.85	A	C
ATOM	2923	CE1	PHE	548	6.357	26.786	15.547	1.00	41.77	A	C
ATOM	2924	CE2	PHE	548	5.646	27.755	13.488	1.00	41.75	A	C
ATOM	2925	CZ	PHE	548	5.344	27.184	14.708	1.00	41.45	A	C
ATOM	2926	C	PHE	548	9.173	26.580	11.314	1.00	48.39	A	C
ATOM	2927	O	PHE	548	8.131	25.937	11.182	1.00	48.35	A	O
ATOM	2928	N	LYS	549	9.668	27.347	10.346	1.00	49.47	A	N
ATOM	2929	CA	LYS	549	9.015	27.430	9.038	1.00	50.48	A	C
ATOM	2930	CB	LYS	549	9.332	28.765	8.365	1.00	52.23	A	C
ATOM	2931	CG	LYS	549	8.777	29.960	9.139	1.00	54.06	A	C
ATOM	2932	CD	LYS	549	9.234	31.291	8.555	1.00	55.69	A	C
ATOM	2933	CE	LYS	549	8.841	32.447	9.469	1.00	56.91	A	C
ATOM	2934	NZ	LYS	549	7.365	32.533	9.696	1.00	56.56	A	N
ATOM	2935	C	LYS	549	9.364	26.242	8.136	1.00	50.05	A	C
ATOM	2936	O	LYS	549	8.705	26.000	7.117	1.00	50.28	A	O
ATOM	2937	N	ASN	550	10.393	25.496	8.532	1.00	48.59	A	N
ATOM	2938	CA	ASN	550	10.809	24.303	7.808	1.00	47.17	A	C
ATOM	2939	CB	ASN	550	12.270	23.982	8.110	1.00	48.23	A	C
ATOM	2940	CG	ASN	550	13.194	24.383	6.984	1.00	49.25	A	C
ATOM	2941	OD1	ASN	550	13.093	23.861	5.874	1.00	49.97	A	O
ATOM	2942	ND2	ASN	550	14.108	25.309	7.263	1.00	50.01	A	N
ATOM	2943	C	ASN	550	9.917	23.147	8.260	1.00	45.63	A	C
ATOM	2944	O	ASN	550	9.519	22.304	7.453	1.00	44.73	A	O
ATOM	2945	N	LEU	551	9.600	23.142	9.559	1.00	44.08	A	N
ATOM	2946	CA	LEU	551	8.749	22.128	10.182	1.00	42.15	A	C
ATOM	2947	CB	LEU	551	8.787	22.251	11.708	1.00	39.35	A	C
ATOM	2948	CG	LEU	551	10.020	21.703	12.430	1.00	36.52	A	C
ATOM	2949	CD1	LEU	551	9.901	21.951	13.911	1.00	34.77	A	C
ATOM	2950	CD2	LEU	551	10.160	20.228	12.161	1.00	35.57	A	C
ATOM	2951	C	LEU	551	7.309	22.203	9.687	1.00	42.26	A	C
ATOM	2952	O	LEU	551	6.593	21.201	9.688	1.00	42.52	A	O
ATOM	2953	N	GLN	552	6.874	23.400	9.302	1.00	42.99	A	N
ATOM	2954	CA	GLN	552	5.528	23.580	8.765	1.00	43.48	A	C
ATOM	2955	CB	GLN	552	5.076	25.032	8.893	1.00	43.07	A	C
ATOM	2956	CG	GLN	552	4.660	25.385	10.304	1.00	42.52	A	C
ATOM	2957	CD	GLN	552	4.107	26.781	10.434	1.00	41.58	A	C
ATOM	2958	OE1	GLN	552	4.789	27.759	10.132	1.00	41.42	A	O
ATOM	2959	NE2	GLN	552	2.873	26.885	10.916	1.00	40.64	A	N
ATOM	2960	C	GLN	552	5.533	23.151	7.310	1.00	43.46	A	C
ATOM	2961	O	GLN	552	4.592	22.519	6.831	1.00	42.74	A	O
ATOM	2962	N	LEU	553	6.630	23.456	6.627	1.00	44.14	A	N
ATOM	2963	CA	LEU	553	6.774	23.092	5.231	1.00	46.57	A	C
ATOM	2964	CB	LEU	553	8.009	23.770	4.645	1.00	47.00	A	C
ATOM	2965	CG	LEU	553	8.054	23.843	3.121	1.00	47.46	A	C
ATOM	2966	CD1	LEU	553	6.764	24.485	2.594	1.00	47.70	A	C
ATOM	2967	CD2	LEU	553	9.282	24.635	2.686	1.00	47.64	A	C
ATOM	2968	C	LEU	553	6.868	21.571	5.083	1.00	47.91	A	C
ATOM	2969	O	LEU	553	6.413	21.012	4.085	1.00	47.88	A	O
ATOM	2970	N	PHE	554	7.446	20.911	6.090	1.00	49.58	A	N
ATOM	2971	CA	PHE	554	7.595	19.452	6.101	1.00	50.40	A	C
ATOM	2972	CB	PHE	554	8.612	19.014	7.153	1.00	48.84	A	C
ATOM	2973	CG	PHE	554	10.027	19.409	6.849	1.00	47.29	A	C
ATOM	2974	CD1	PHE	554	10.429	19.692	5.551	1.00	46.41	A	C
ATOM	2975	CD2	PHE	554	10.970	19.468	7.874	1.00	46.53	A	C
ATOM	2976	CE1	PHE	554	11.755	20.026	5.277	1.00	46.27	A	C
ATOM	2977	CE2	PHE	554	12.290	19.799	7.608	1.00	46.40	A	C

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ATOM	2978	CZ	PHE	554	12.685	20.078	6.307	1.00	45.83	A	C
ATOM	2979	C	PHE	554	6.268	18.747	6.388	1.00	52.16	A	C
ATOM	2980	O	PHE	554	5.953	17.749	5.746	1.00	52.99	A	O
ATOM	2981	N	MET	555	5.516	19.243	7.372	1.00	53.51	A	N
ATOM	2982	CA	MET	555	4.219	18.658	7.735	1.00	55.64	A	C
ATOM	2983	CB	MET	555	3.802	19.096	9.143	1.00	56.30	A	C
ATOM	2984	CG	MET	555	4.533	18.396	10.278	1.00	57.16	A	C
ATOM	2985	SD	MET	555	4.252	19.176	11.891	1.00	57.77	A	S
ATOM	2986	CE	MET	555	2.958	18.142	12.557	1.00	56.94	A	C
ATOM	2987	C	MET	555	3.122	19.050	6.747	1.00	57.18	A	C
ATOM	2988	O	MET	555	1.933	18.853	7.016	1.00	57.42	A	O
ATOM	2989	N	GLU	556	3.541	19.574	5.596	1.00	58.71	A	N
ATOM	2990	CA	GLU	556	2.648	20.032	4.535	1.00	59.47	A	C
ATOM	2991	CB	GLU	556	3.469	20.781	3.481	1.00	61.08	A	C
ATOM	2992	CG	GLU	556	2.656	21.506	2.421	1.00	63.81	A	C
ATOM	2993	CD	GLU	556	1.744	22.586	2.993	1.00	65.56	A	C
ATOM	2994	OE1	GLU	556	2.089	23.186	4.041	1.00	66.12	A	O
ATOM	2995	OE2	GLU	556	0.681	22.841	2.379	1.00	66.22	A	O
ATOM	2996	C	GLU	556	1.836	18.925	3.862	1.00	59.39	A	C
ATOM	2997	O	GLU	556	2.399	18.021	3.231	1.00	59.50	A	O
ATOM	2998	N	ASN	557	0.511	19.024	3.990	1.00	58.82	A	N
ATOM	2999	CA	ASN	557	-0.442	18.072	3.398	1.00	58.06	A	C
ATOM	3000	CB	ASN	557	-0.498	18.242	1.877	1.00	58.06	A	C
ATOM	3001	CG	ASN	557	-0.682	19.676	1.467	1.00	58.41	A	C
ATOM	3002	OD1	ASN	557	-1.732	20.278	1.717	1.00	57.90	A	O
ATOM	3003	ND2	ASN	557	0.353	20.252	0.861	1.00	57.94	A	N
ATOM	3004	C	ASN	557	-0.153	16.614	3.736	1.00	57.38	A	C
ATOM	3005	O	ASN	557	-0.271	15.727	2.885	1.00	57.13	A	O
ATOM	3006	N	LYS	558	0.231	16.376	4.984	1.00	56.40	A	N
ATOM	3007	CA	LYS	558	0.539	15.032	5.444	1.00	55.10	A	C
ATOM	3008	CB	LYS	558	1.930	14.994	6.089	1.00	53.71	A	C
ATOM	3009	CG	LYS	558	3.105	15.009	5.121	1.00	52.01	A	C
ATOM	3010	CD	LYS	558	4.412	15.017	5.897	1.00	50.87	A	C
ATOM	3011	CE	LYS	558	5.577	14.466	5.093	1.00	50.36	A	C
ATOM	3012	NZ	LYS	558	5.980	15.344	3.970	1.00	51.10	A	N
ATOM	3013	C	LYS	558	-0.497	14.530	6.443	1.00	55.00	A	C
ATOM	3014	O	LYS	558	-1.078	15.305	7.207	1.00	54.66	A	O
ATOM	3015	N	GLN	559	-0.754	13.229	6.393	1.00	54.72	A	N
ATOM	3016	CA	GLN	559	-1.681	12.592	7.314	1.00	54.37	A	C
ATOM	3017	CB	GLN	559	-2.230	11.301	6.697	1.00	54.13	A	C
ATOM	3018	CG	GLN	559	-2.983	11.497	5.387	1.00	52.16	A	C
ATOM	3019	CD	GLN	559	-4.221	12.351	5.547	1.00	50.94	A	C
ATOM	3020	OE1	GLN	559	-5.146	11.992	6.280	1.00	48.55	A	O
ATOM	3021	NE2	GLN	559	-4.249	13.489	4.857	1.00	50.50	A	N
ATOM	3022	C	GLN	559	-0.848	12.271	8.559	1.00	54.80	A	C
ATOM	3023	O	GLN	559	0.383	12.203	8.485	1.00	55.40	A	O
ATOM	3024	N	PRO	560	-1.500	12.069	9.717	1.00	54.84	A	N
ATOM	3025	CD	PRO	560	-2.957	12.093	9.932	1.00	54.46	A	C
ATOM	3026	CA	PRO	560	-0.798	11.756	10.968	1.00	55.13	A	C
ATOM	3027	CB	PRO	560	-1.936	11.300	11.877	1.00	54.83	A	C
ATOM	3028	CG	PRO	560	-3.057	12.173	11.435	1.00	54.83	A	C
ATOM	3029	C	PRO	560	0.278	10.671	10.837	1.00	55.21	A	C
ATOM	3030	O	PRO	560	1.421	10.870	11.244	1.00	55.13	A	O
ATOM	3031	N	GLU	561	-0.096	9.552	10.224	1.00	55.37	A	N
ATOM	3032	CA	GLU	561	0.779	8.397	10.020	1.00	55.75	A	C
ATOM	3033	CB	GLU	561	0.027	7.314	9.236	1.00	58.00	A	C
ATOM	3034	CG	GLU	561	-1.385	7.006	9.727	1.00	60.98	A	C
ATOM	3035	CD	GLU	561	-2.276	6.431	8.626	1.00	62.49	A	C
ATOM	3036	OE1	GLU	561	-3.110	7.191	8.080	1.00	63.56	A	O
ATOM	3037	OE2	GLU	561	-2.145	5.228	8.303	1.00	62.62	A	O
ATOM	3038	C	GLU	561	2.073	8.703	9.265	1.00	55.46	A	C
ATOM	3039	O	GLU	561	3.116	8.111	9.543	1.00	56.07	A	O
ATOM	3040	N	ASP	562	1.988	9.596	8.282	1.00	54.57	A	N

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ATOM	3041	CA	ASP	562	3.131	9.957	7.446	1.00	53.41	A	C
ATOM	3042	CB	ASP	562	2.723	11.036	6.433	1.00	53.71	A	C
ATOM	3043	CG	ASP	562	1.560	10.604	5.529	1.00	54.05	A	C
ATOM	3044	OD1	ASP	562	1.191	9.408	5.516	1.00	53.97	A	O
ATOM	3045	OD2	ASP	562	1.010	11.474	4.821	1.00	53.61	A	O
ATOM	3046	C	ASP	562	4.368	10.407	8.224	1.00	53.11	A	C
ATOM	3047	O	ASP	562	4.264	11.133	9.213	1.00	53.03	A	O
ATOM	3048	N	ASP	563	5.535	9.944	7.780	1.00	52.12	A	N
ATOM	3049	CA	ASP	563	6.810	10.291	8.409	1.00	51.13	A	C
ATOM	3050	CB	ASP	563	7.928	9.328	7.960	1.00	51.70	A	C
ATOM	3051	CG	ASP	563	7.763	7.904	8.514	1.00	52.42	A	C
ATOM	3052	OD1	ASP	563	8.568	7.023	8.132	1.00	50.81	A	O
ATOM	3053	OD2	ASP	563	6.842	7.661	9.329	1.00	53.40	A	O
ATOM	3054	C	ASP	563	7.205	11.726	8.058	1.00	50.50	A	C
ATOM	3055	O	ASP	563	7.305	12.080	6.882	1.00	51.60	A	O
ATOM	3056	N	LEU	564	7.454	12.535	9.084	1.00	48.99	A	N
ATOM	3057	CA	LEU	564	7.839	13.934	8.920	1.00	47.56	A	C
ATOM	3058	CB	LEU	564	8.228	14.524	10.274	1.00	46.30	A	C
ATOM	3059	CG	LEU	564	8.810	15.937	10.245	1.00	45.09	A	C
ATOM	3060	CD1	LEU	564	7.683	16.947	10.291	1.00	44.55	A	C
ATOM	3061	CD2	LEU	564	9.744	16.143	11.416	1.00	45.33	A	C
ATOM	3062	C	LEU	564	8.985	14.183	7.936	1.00	47.63	A	C
ATOM	3063	O	LEU	564	8.884	15.040	7.064	1.00	47.07	A	O
ATOM	3064	N	PHE	565	10.082	13.452	8.100	1.00	48.33	A	N
ATOM	3065	CA	PHE	565	11.256	13.626	7.245	1.00	48.85	A	C
ATOM	3066	CB	PHE	565	12.547	13.450	8.065	1.00	47.79	A	C
ATOM	3067	CG	PHE	565	12.733	14.467	9.158	1.00	45.68	A	C
ATOM	3068	CD1	PHE	565	12.768	15.823	8.873	1.00	45.35	A	C
ATOM	3069	CD2	PHE	565	12.897	14.063	10.473	1.00	45.58	A	C
ATOM	3070	CE1	PHE	565	12.965	16.766	9.884	1.00	44.91	A	C
ATOM	3071	CE2	PHE	565	13.096	14.999	11.486	1.00	45.76	A	C
ATOM	3072	CZ	PHE	565	13.130	16.353	11.188	1.00	44.59	A	C
ATOM	3073	C	PHE	565	11.324	12.733	5.998	1.00	49.51	A	C
ATOM	3074	O	PHE	565	12.219	11.882	5.887	1.00	49.21	A	O
ATOM	3075	N	ASP	566	10.392	12.922	5.062	1.00	50.19	A	N
ATOM	3076	CA	ASP	566	10.409	12.146	3.820	1.00	51.54	A	C
ATOM	3077	CB	ASP	566	9.198	12.483	2.927	1.00	53.14	A	C
ATOM	3078	CG	ASP	566	9.196	13.939	2.419	1.00	55.56	A	C
ATOM	3079	OD1	ASP	566	8.623	14.823	3.104	1.00	55.75	A	O
ATOM	3080	OD2	ASP	566	9.730	14.191	1.311	1.00	56.28	A	O
ATOM	3081	C	ASP	566	11.738	12.443	3.106	1.00	51.82	A	C
ATOM	3082	O	ASP	566	12.208	13.586	3.101	1.00	51.72	A	O
ATOM	3083	N	ARG	567	12.361	11.405	2.551	1.00	52.33	A	N
ATOM	3084	CA	ARG	567	13.663	11.526	1.870	1.00	52.40	A	C
ATOM	3085	CB	ARG	567	13.690	12.720	0.899	1.00	54.19	A	C
ATOM	3086	CG	ARG	567	13.509	12.351	-0.571	1.00	55.53	A	C
ATOM	3087	CD	ARG	567	13.326	13.594	-1.414	1.00	55.77	A	C
ATOM	3088	NE	ARG	567	12.150	14.346	-0.991	1.00	57.14	A	N
ATOM	3089	CZ	ARG	567	12.062	15.671	-1.017	1.00	59.07	A	C
ATOM	3090	NH1	ARG	567	13.093	16.393	-1.446	1.00	59.40	A	N
ATOM	3091	NH2	ARG	567	10.940	16.273	-0.628	1.00	59.01	A	N
ATOM	3092	C	ARG	567	14.836	11.634	2.859	1.00	51.18	A	C
ATOM	3093	O	ARG	567	15.892	12.177	2.522	1.00	50.69	A	O
ATOM	3094	N	LEU	568	14.641	11.101	4.068	1.00	49.37	A	N
ATOM	3095	CA	LEU	568	15.659	11.114	5.114	1.00	46.90	A	C
ATOM	3096	CB	LEU	568	15.433	12.291	6.072	1.00	46.61	A	C
ATOM	3097	CG	LEU	568	16.343	12.380	7.306	1.00	47.61	A	C
ATOM	3098	CD1	LEU	568	17.799	12.536	6.903	1.00	47.92	A	C
ATOM	3099	CD2	LEU	568	15.927	13.541	8.184	1.00	48.60	A	C
ATOM	3100	C	LEU	568	15.664	9.798	5.894	1.00	45.73	A	C
ATOM	3101	O	LEU	568	14.663	9.427	6.500	1.00	45.16	A	O
ATOM	3102	N	ASN	569	16.787	9.083	5.833	1.00	44.72	A	N
ATOM	3103	CA	ASN	569	16.981	7.808	6.538	1.00	43.43	A	C

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ATOM	3104	CB	ASN	569	17.501	6.728	5.585	1.00	43.00	A	C
ATOM	3105	CG	ASN	569	16.506	6.347	4.539	1.00	43.92	A	C
ATOM	3106	OD1	ASN	569	15.325	6.137	4.827	1.00	45.48	A	O
ATOM	3107	ND2	ASN	569	16.977	6.225	3.306	1.00	44.62	A	N
ATOM	3108	C	ASN	569	18.057	7.997	7.597	1.00	42.03	A	C
ATOM	3109	O	ASN	569	18.515	9.117	7.833	1.00	42.49	A	O
ATOM	3110	N	THR	570	18.460	6.898	8.230	1.00	39.65	A	N
ATOM	3111	CA	THR	570	19.536	6.954	9.211	1.00	37.41	A	C
ATOM	3112	CB	THR	570	19.380	5.917	10.314	1.00	37.80	A	C
ATOM	3113	OG1	THR	570	19.392	4.603	9.742	1.00	39.45	A	O
ATOM	3114	CG2	THR	570	18.091	6.157	11.077	1.00	38.83	A	C
ATOM	3115	C	THR	570	20.829	6.685	8.448	1.00	34.94	A	C
ATOM	3116	O	THR	570	21.910	7.034	8.912	1.00	34.90	A	O
ATOM	3117	N	GLY	571	20.695	6.070	7.271	1.00	33.12	A	N
ATOM	3118	CA	GLY	571	21.837	5.778	6.415	1.00	29.54	A	C
ATOM	3119	C	GLY	571	22.198	7.007	5.595	1.00	27.60	A	C
ATOM	3120	O	GLY	571	23.363	7.215	5.236	1.00	26.54	A	O
ATOM	3121	N	ILE	572	21.179	7.809	5.283	1.00	24.87	A	N
ATOM	3122	CA	ILE	572	21.336	9.056	4.536	1.00	23.00	A	C
ATOM	3123	CB	ILE	572	19.941	9.580	4.067	1.00	22.95	A	C
ATOM	3124	CG2	ILE	572	19.930	11.095	3.931	1.00	21.63	A	C
ATOM	3125	CG1	ILE	572	19.553	8.904	2.749	1.00	23.99	A	C
ATOM	3126	CD1	ILE	572	18.074	8.955	2.424	1.00	24.54	A	C
ATOM	3127	C	ILE	572	22.026	10.063	5.466	1.00	21.27	A	C
ATOM	3128	O	ILE	572	23.029	10.692	5.108	1.00	20.18	A	O
ATOM	3129	N	LEU	573	21.497	10.152	6.682	1.00	19.67	A	N
ATOM	3130	CA	LEU	573	22.008	11.029	7.716	1.00	18.74	A	C
ATOM	3131	CB	LEU	573	21.078	10.966	8.922	1.00	17.26	A	C
ATOM	3132	CG	LEU	573	21.383	11.755	10.192	1.00	16.65	A	C
ATOM	3133	CD1	LEU	573	21.369	13.252	9.938	1.00	15.21	A	C
ATOM	3134	CD2	LEU	573	20.346	11.375	11.232	1.00	15.73	A	C
ATOM	3135	C	LEU	573	23.435	10.649	8.111	1.00	19.57	A	C
ATOM	3136	O	LEU	573	24.263	11.529	8.306	1.00	20.26	A	O
ATOM	3137	N	ASN	574	23.719	9.349	8.226	1.00	20.49	A	N
ATOM	3138	CA	ASN	574	25.059	8.872	8.586	1.00	22.08	A	C
ATOM	3139	CB	ASN	574	25.039	7.406	9.041	1.00	21.22	A	C
ATOM	3140	CG	ASN	574	24.576	7.236	10.482	1.00	21.62	A	C
ATOM	3141	OD1	ASN	574	24.788	8.106	11.329	1.00	22.20	A	O
ATOM	3142	ND2	ASN	574	23.951	6.096	10.768	1.00	20.02	A	N
ATOM	3143	C	ASN	574	26.048	9.022	7.436	1.00	24.02	A	C
ATOM	3144	O	ASN	574	27.211	9.366	7.654	1.00	23.60	A	O
ATOM	3145	N	LYS	575	25.588	8.745	6.214	1.00	26.41	A	N
ATOM	3146	CA	LYS	575	26.438	8.865	5.028	1.00	27.78	A	C
ATOM	3147	CB	LYS	575	25.670	8.458	3.765	1.00	29.51	A	C
ATOM	3148	CG	LYS	575	26.544	8.250	2.534	1.00	32.44	A	C
ATOM	3149	CD	LYS	575	25.748	7.645	1.378	1.00	36.22	A	C
ATOM	3150	CE	LYS	575	26.601	7.513	0.111	1.00	38.11	A	C
ATOM	3151	NZ	LYS	575	27.752	6.574	0.283	1.00	39.25	A	N
ATOM	3152	C	LYS	575	26.966	10.299	4.909	1.00	27.16	A	C
ATOM	3153	O	LYS	575	28.057	10.516	4.385	1.00	27.65	A	O
ATOM	3154	N	HIS	576	26.195	11.267	5.407	1.00	26.48	A	N
ATOM	3155	CA	HIS	576	26.613	12.664	5.389	1.00	26.11	A	C
ATOM	3156	CB	HIS	576	25.413	13.621	5.485	1.00	28.65	A	C
ATOM	3157	CG	HIS	576	25.801	15.071	5.560	1.00	31.19	A	C
ATOM	3158	CD2	HIS	576	26.711	15.790	4.857	1.00	31.78	A	C
ATOM	3159	ND1	HIS	576	25.247	15.944	6.472	1.00	32.59	A	N
ATOM	3160	CE1	HIS	576	25.803	17.136	6.332	1.00	33.54	A	C
ATOM	3161	NE2	HIS	576	26.694	17.069	5.359	1.00	32.48	A	N
ATOM	3162	C	HIS	576	27.547	12.915	6.561	1.00	24.33	A	C
ATOM	3163	O	HIS	576	28.589	13.539	6.396	1.00	23.34	A	O
ATOM	3164	N	LEU	577	27.167	12.428	7.740	1.00	22.67	A	N
ATOM	3165	CA	LEU	577	27.975	12.603	8.941	1.00	21.73	A	C
ATOM	3166	CB	LEU	577	27.287	11.980	10.146	1.00	20.27	A	C



ATOM	3167	CG	LEU	577	25.992	12.693	10.531	1.00	20.10	A	C
ATOM	3168	CD1	LEU	577	25.420	12.061	11.771	1.00	22.08	A	C
ATOM	3169	CD2	LEU	577	26.238	14.165	10.781	1.00	20.03	A	C
ATOM	3170	C	LEU	577	29.370	12.030	8.770	1.00	21.65	A	C
ATOM	3171	O	LEU	577	30.324	12.511	9.369	1.00	20.53	A	O
ATOM	3172	N	GLN	578	29.477	11.015	7.924	1.00	22.92	A	N
ATOM	3173	CA	GLN	578	30.746	10.369	7.627	1.00	24.29	A	C
ATOM	3174	CB	GLN	578	30.496	9.085	6.844	1.00	23.36	A	C
ATOM	3175	CG	GLN	578	31.702	8.554	6.099	1.00	24.87	A	C
ATOM	3176	CD	GLN	578	32.677	7.823	6.986	1.00	24.49	A	C
ATOM	3177	OE1	GLN	578	32.541	6.620	7.212	1.00	25.02	A	O
ATOM	3178	NE2	GLN	578	33.689	8.535	7.470	1.00	24.93	A	N
ATOM	3179	C	GLN	578	31.602	11.314	6.805	1.00	26.08	A	C
ATOM	3180	O	GLN	578	32.830	11.293	6.899	1.00	27.45	A	O
ATOM	3181	N	ASP	579	30.942	12.144	6.001	1.00	28.23	A	N
ATOM	3182	CA	ASP	579	31.620	13.113	5.142	1.00	30.07	A	C
ATOM	3183	CB	ASP	579	30.636	13.739	4.142	1.00	33.10	A	C
ATOM	3184	CG	ASP	579	29.922	12.707	3.281	1.00	35.89	A	C
ATOM	3185	OD1	ASP	579	30.260	11.497	3.360	1.00	36.75	A	O
ATOM	3186	OD2	ASP	579	29.012	13.121	2.522	1.00	37.27	A	O
ATOM	3187	C	ASP	579	32.278	14.224	5.950	1.00	29.28	A	C
ATOM	3188	O	ASP	579	33.439	14.556	5.711	1.00	30.08	A	O
ATOM	3189	N	LEU	580	31.525	14.796	6.892	1.00	28.21	A	N
ATOM	3190	CA	LEU	580	32.007	15.879	7.742	1.00	27.01	A	C
ATOM	3191	CB	LEU	580	30.904	16.372	8.673	1.00	26.62	A	C
ATOM	3192	CG	LEU	580	29.559	16.853	8.138	1.00	26.39	A	C
ATOM	3193	CD1	LEU	580	28.709	17.287	9.317	1.00	26.16	A	C
ATOM	3194	CD2	LEU	580	29.740	18.001	7.176	1.00	26.30	A	C
ATOM	3195	C	LEU	580	33.203	15.482	8.595	1.00	27.15	A	C
ATOM	3196	O	LEU	580	34.080	16.307	8.844	1.00	27.98	A	O
ATOM	3197	N	MET	581	33.246	14.224	9.029	1.00	27.07	A	N
ATOM	3198	CA	MET	581	34.338	13.742	5.877	1.00	28.31	A	C
ATOM	3199	CB	MET	581	34.082	14.203	11.315	1.00	28.66	A	C
ATOM	3200	CG	MET	581	35.300	14.222	12.191	1.00	29.16	A	C
ATOM	3201	SD	MET	581	34.819	14.532	13.872	1.00	29.55	A	S
ATOM	3202	CE	MET	581	34.909	12.871	14.569	1.00	25.01	A	C
ATOM	3203	C	MET	581	34.441	12.211	9.825	1.00	27.79	A	C
ATOM	3204	O	MET	581	33.453	11.519	10.040	1.00	27.73	A	O
ATOM	3205	N	GLU	582	35.634	11.681	9.573	1.00	28.36	A	N
ATOM	3206	CA	GLU	582	35.815	10.228	9.475	1.00	29.92	A	C
ATOM	3207	CB	GLU	582	37.260	9.866	9.108	1.00	33.69	A	C
ATOM	3208	CG	GLU	582	37.982	10.880	8.194	1.00	38.50	A	C
ATOM	3209	CD	GLU	582	38.793	11.925	8.975	1.00	40.36	A	C
ATOM	3210	OE1	GLU	582	38.387	13.113	9.002	1.00	39.94	A	O
ATOM	3211	OE2	GLU	582	39.841	11.550	9.557	1.00	41.14	A	O
ATOM	3212	C	GLU	582	35.431	9.504	10.757	1.00	28.41	A	C
ATOM	3213	O	GLU	582	35.944	9.814	11.830	1.00	28.38	A	O
ATOM	3214	N	GLY	583	34.516	8.549	10.639	1.00	26.81	A	N
ATOM	3215	CA	GLY	583	34.083	7.793	11.800	1.00	26.06	A	C
ATOM	3216	C	GLY	583	32.887	8.347	12.560	1.00	25.67	A	C
ATOM	3217	O	GLY	583	32.368	7.690	13.471	1.00	26.91	A	O
ATOM	3218	N	LEU	584	32.437	9.546	12.200	1.00	23.97	A	N
ATOM	3219	CA	LEU	584	31.286	10.150	12.868	1.00	21.21	A	C
ATOM	3220	CB	LEU	584	31.224	11.648	12.562	1.00	21.15	A	C
ATOM	3221	CG	LEU	584	30.038	12.436	13.122	1.00	21.37	A	C
ATOM	3222	CD1	LEU	584	30.017	12.319	14.628	1.00	22.27	A	C
ATOM	3223	CD2	LEU	584	30.120	13.901	12.720	1.00	22.21	A	C
ATOM	3224	C	LEU	584	29.974	9.485	12.452	1.00	19.98	A	C
ATOM	3225	O	LEU	584	29.796	9.125	11.287	1.00	19.99	A	O
ATOM	3226	N	THR	585	29.105	9.231	13.424	1.00	17.62	A	N
ATOM	3227	CA	THR	585	27.798	8.648	13.147	1.00	16.79	A	C
ATOM	3228	CB	THR	585	27.751	7.104	13.253	1.00	17.12	A	C
ATOM	3229	OG1	THR	585	28.214	6.680	14.540	1.00	18.58	A	O

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ATOM	3230	CG2	THR	585	28.577	6.459	12.153	1.00	17.66	A	C
ATOM	3231	C	THR	585	26.855	9.234	14.154	1.00	15.68	A	C
ATOM	3232	O	THR	585	27.272	9.590	15.249	1.00	14.66	A	O
ATOM	3233	N	ALA	586	25.580	9.294	13.786	1.00	15.50	A	N
ATOM	3234	CA	ALA	586	24.520	9.862	14.617	1.00	16.30	A	C
ATOM	3235	CB	ALA	586	23.175	9.335	14.157	1.00	17.17	A	C
ATOM	3236	C	ALA	586	24.647	9.718	16.140	1.00	16.78	A	C
ATOM	3237	O	ALA	586	24.615	10.709	16.874	1.00	17.15	A	O
ATOM	3238	N	LYS	587	24.824	8.495	16.621	1.00	16.71	A	N
ATOM	3239	CA	LYS	587	24.922	8.296	18.054	1.00	15.77	A	C
ATOM	3240	CB	LYS	587	24.818	6.813	18.418	1.00	13.94	A	C
ATOM	3241	CG	LYS	587	26.059	6.000	18.163	1.00	13.33	A	C
ATOM	3242	CD	LYS	587	25.825	4.554	18.551	1.00	12.77	A	C
ATOM	3243	CE	LYS	587	27.127	3.815	18.640	1.00	12.09	A	C
ATOM	3244	NZ	LYS	587	27.985	4.510	19.622	1.00	13.35	A	N
ATOM	3245	C	LYS	587	26.146	8.926	18.709	1.00	16.47	A	C
ATOM	3246	O	LYS	587	26.115	9.184	19.918	1.00	19.11	A	O
ATOM	3247	N	VAL	588	27.209	9.199	17.944	1.00	14.06	A	N
ATOM	3248	CA	VAL	588	28.399	9.796	18.549	1.00	12.16	A	C
ATOM	3249	CB	VAL	588	29.479	10.138	17.533	1.00	12.06	A	C
ATOM	3250	CG1	VAL	588	30.662	10.754	18.244	1.00	13.10	A	C
ATOM	3251	CG2	VAL	588	29.925	8.900	16.799	1.00	13.87	A	C
ATOM	3252	C	VAL	588	28.035	11.064	19.302	1.00	12.25	A	C
ATOM	3253	O	VAL	588	28.559	11.320	20.377	1.00	12.75	A	O
ATOM	3254	N	PHE	589	27.103	11.831	18.738	1.00	11.93	A	N
ATOM	3255	CA	PHE	589	26.626	13.070	19.336	1.00	9.17	A	C
ATOM	3256	CB	PHE	589	25.499	13.657	18.487	1.00	7.21	A	C
ATOM	3257	CG	PHE	589	25.969	14.461	17.328	1.00	4.32	A	C
ATOM	3258	CD1	PHE	589	26.259	13.853	16.113	1.00	5.14	A	C
ATOM	3259	CD2	PHE	589	26.132	15.833	17.453	1.00	2.32	A	C
ATOM	3260	CE1	PHE	589	26.716	14.611	15.028	1.00	5.74	A	C
ATOM	3261	CE2	PHE	589	26.583	16.589	16.390	1.00	2.77	A	C
ATOM	3262	CZ	PHE	589	26.879	15.982	15.173	1.00	3.68	A	C
ATOM	3263	C	PHE	589	26.127	12.895	20.769	1.00	8.83	A	C
ATOM	3264	O	PHE	589	26.463	13.680	21.640	1.00	10.49	A	O
ATOM	3265	N	ARG	590	25.316	11.876	21.017	1.00	9.29	A	N
ATOM	3266	CA	ARG	590	24.795	11.658	22.367	1.00	10.40	A	C
ATOM	3267	CB	ARG	590	23.732	10.554	22.392	1.00	12.26	A	C
ATOM	3268	CG	ARG	590	22.743	10.632	21.245	1.00	16.87	A	C
ATOM	3269	CD	ARG	590	21.570	9.692	21.470	1.00	22.06	A	C
ATOM	3270	NE	ARG	590	20.648	10.215	22.478	1.00	24.92	A	N
ATOM	3271	CZ	ARG	590	20.459	9.677	23.677	1.00	25.48	A	C
ATOM	3272	NH1	ARG	590	21.132	8.593	24.034	1.00	24.99	A	N
ATOM	3273	NH2	ARG	590	19.570	10.209	24.504	1.00	25.50	A	N
ATOM	3274	C	ARG	590	25.910	11.347	23.360	1.00	8.15	A	C
ATOM	3275	O	ARG	590	25.754	11.553	24.554	1.00	8.38	A	O
ATOM	3276	N	THR	591	27.021	10.817	22.874	1.00	6.17	A	N
ATOM	3277	CA	THR	591	28.136	10.545	23.754	1.00	5.43	A	C
ATOM	3278	CB	THR	591	29.095	9.544	23.139	1.00	2.60	A	C
ATOM	3279	OG1	THR	591	28.527	8.235	23.244	1.00	4.30	A	O
ATOM	3280	CG2	THR	591	30.443	9.586	23.831	1.00	1.00	A	C
ATOM	3281	C	THR	591	28.839	11.880	23.982	1.00	7.44	A	C
ATOM	3282	O	THR	591	29.134	12.259	25.118	1.00	8.69	A	O
ATOM	3283	N	TYR	592	29.064	12.618	22.901	1.00	9.27	A	N
ATOM	3284	CA	TYR	592	29.712	13.907	23.019	1.00	10.31	A	C
ATOM	3285	CB	TYR	592	29.782	14.638	21.678	1.00	10.24	A	C
ATOM	3286	CG	TYR	592	30.192	16.087	21.850	1.00	12.17	A	C
ATOM	3287	CD1	TYR	592	31.482	16.419	22.250	1.00	14.18	A	C
ATOM	3288	CE1	TYR	592	31.845	17.737	22.513	1.00	14.27	A	C
ATOM	3289	CD2	TYR	592	29.270	17.122	21.701	1.00	13.10	A	C
ATOM	3290	CE2	TYR	592	29.629	18.448	21.961	1.00	14.03	A	C
ATOM	3291	CZ	TYR	592	30.918	18.737	22.373	1.00	13.76	A	C
ATOM	3292	OH	TYR	592	31.279	20.016	22.696	1.00	16.65	A	O

ATOM	3293	C	TYR	592	28.953	14.758	24.025	1.00	11.33	A	C
ATOM	3294	O	TYR	592	29.492	15.113	25.061	1.00	12.54	A	O
ATOM	3295	N	ASN	593	27.682	15.018	23.750	1.00	12.34	A	N
ATOM	3296	CA	ASN	593	26.874	15.845	24.630	1.00	13.87	A	C
ATOM	3297	CB	ASN	593	25.488	16.057	24.037	1.00	14.23	A	C
ATOM	3298	CG	ASN	593	25.525	16.958	22.832	1.00	17.25	A	C
ATOM	3299	OD1	ASN	593	24.948	16.649	21.791	1.00	19.81	A	O
ATOM	3300	ND2	ASN	593	26.240	18.073	22.952	1.00	19.19	A	N
ATOM	3301	C	ASN	593	26.785	15.360	26.063	1.00	13.77	A	C
ATOM	3302	O	ASN	593	26.760	16.161	27.003	1.00	14.26	A	O
ATOM	3303	N	ALA	594	26.784	14.050	26.245	1.00	12.74	A	N
ATOM	3304	CA	ALA	594	26.701	13.525	27.592	1.00	11.96	A	C
ATOM	3305	CB	ALA	594	26.464	12.036	27.566	1.00	13.13	A	C
ATOM	3306	C	ALA	594	27.979	13.857	28.342	1.00	11.25	A	C
ATOM	3307	O	ALA	594	27.938	14.479	29.401	1.00	10.57	A	O
ATOM	3308	N	SER	595	29.112	13.504	27.752	1.00	9.71	A	N
ATOM	3309	CA	SER	595	30.394	13.764	28.383	1.00	11.30	A	C
ATOM	3310	CB	SER	595	31.511	13.070	27.602	1.00	12.27	A	C
ATOM	3311	OG	SER	595	31.192	11.704	27.381	1.00	15.64	A	O
ATOM	3312	C	SER	595	30.711	15.256	28.597	1.00	10.21	A	C
ATOM	3313	O	SER	595	31.258	15.634	29.622	1.00	10.59	A	O
ATOM	3314	N	ILE	596	30.376	16.107	27.642	1.00	9.64	A	N
ATOM	3315	CA	ILE	596	30.648	17.525	27.814	1.00	9.65	A	C
ATOM	3316	CB	ILE	596	30.464	18.295	26.485	1.00	8.45	A	C
ATOM	3317	CG2	ILE	596	29.048	18.804	26.338	1.00	9.90	A	C
ATOM	3318	CG1	ILE	596	31.409	19.479	26.442	1.00	8.52	A	C
ATOM	3319	CD1	ILE	596	32.836	19.092	26.718	1.00	11.31	A	C
ATOM	3320	C	ILE	596	29.790	18.119	28.959	1.00	9.90	A	C
ATOM	3321	O	ILE	596	30.248	18.988	29.693	1.00	12.22	A	O
ATOM	3322	N	THR	597	28.579	17.601	29.145	1.00	10.01	A	N
ATOM	3323	CA	THR	597	27.675	18.054	30.204	1.00	9.41	A	C
ATOM	3324	CB	THR	597	26.242	17.486	29.990	1.00	9.82	A	C
ATOM	3325	OG1	THR	597	25.709	17.989	28.761	1.00	10.32	A	O
ATOM	3326	CG2	THR	597	25.308	17.873	31.131	1.00	8.03	A	C
ATOM	3327	C	THR	597	28.166	17.662	31.609	1.00	10.14	A	C
ATOM	3328	O	THR	597	28.012	18.434	32.549	1.00	9.98	A	O
ATOM	3329	N	LEU	598	28.724	16.457	31.753	1.00	10.73	A	N
ATOM	3330	CA	LEU	598	29.232	15.989	33.042	1.00	10.37	A	C
ATOM	3331	CB	LEU	598	29.602	14.502	33.001	1.00	7.73	A	C
ATOM	3332	CG	LEU	598	30.156	14.038	34.362	1.00	5.99	A	C
ATOM	3333	CD1									

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ATOM	3356	CA	GLN	601	28.484	20.290	35.631	1.00	15.94	A	C
ATOM	3357	CB	GLN	601	27.340	19.296	35.481	1.00	15.09	A	C
ATOM	3358	CG	GLN	601	26.249	19.823	34.617	1.00	15.79	A	C
ATOM	3359	CD	GLN	601	25.654	21.075	35.203	1.00	16.75	A	C
ATOM	3360	OE1	GLN	601	24.953	21.013	36.211	1.00	18.47	A	O
ATOM	3361	NE2	GLN	601	25.959	22.227	34.604	1.00	15.31	A	N
ATOM	3362	C	GLN	601	29.297	19.971	36.886	1.00	16.70	A	C
ATOM	3363	O	GLN	601	28.907	20.351	37.988	1.00	16.01	A	O
ATOM	3364	N	LEU	602	30.392	19.230	36.719	1.00	18.54	A	N
ATOM	3365	CA	LEU	602	31.275	18.870	37.826	1.00	20.33	A	C
ATOM	3366	CB	LEU	602	32.142	17.675	37.445	1.00	20.16	A	C
ATOM	3367	CG	LEU	602	31.473	16.323	37.573	1.00	19.88	A	C
ATOM	3368	CD1	LEU	602	32.379	15.235	37.043	1.00	19.02	A	C
ATOM	3369	CD2	LEU	602	31.159	16.118	39.036	1.00	21.07	A	C
ATOM	3370	C	LEU	602	32.175	20.045	38.206	1.00	21.94	A	C
ATOM	3371	O	LEU	602	32.514	20.224	39.376	1.00	21.32	A	O
ATOM	3372	N	LYS	603	32.583	20.820	37.204	1.00	23.47	A	N
ATOM	3373	CA	LYS	603	33.428	21.988	37.423	1.00	26.74	A	C
ATOM	3374	CB	LYS	603	33.885	22.587	36.085	1.00	26.86	A	C
ATOM	3375	CG	LYS	603	35.265	22.138	35.626	1.00	29.22	A	C
ATOM	3376	CD	LYS	603	35.405	22.192	34.107	1.00	32.02	A	C
ATOM	3377	CE	LYS	603	35.234	23.599	33.552	1.00	34.68	A	C
ATOM	3378	NZ	LYS	603	36.326	24.536	33.976	1.00	37.54	A	N
ATOM	3379	C	LYS	603	32.623	23.030	38.172	1.00	27.93	A	C
ATOM	3380	O	LYS	603	33.143	23.705	39.065	1.00	29.55	A	O
ATOM	3381	N	GLU	604	31.326	23.061	37.861	1.00	28.80	A	N
ATOM	3382	CA	GLU	604	30.384	24.028	38.402	1.00	29.97	A	C
ATOM	3383	CB	GLU	604	29.531	24.556	37.252	1.00	31.24	A	C
ATOM	3384	CG	GLU	604	30.384	25.108	36.104	1.00	37.94	A	C
ATOM	3385	CD	GLU	604	29.569	25.557	34.907	1.00	41.60	A	C
ATOM	3386	OE1	GLU	604	28.357	25.809	35.090	1.00	44.40	A	O
ATOM	3387	OE2	GLU	604	30.144	25.658	33.790	1.00	43.19	A	O
ATOM	3388	C	GLU	604	29.489	23.636	39.557	1.00	29.54	A	C
ATOM	3389	O	GLU	604	28.584	24.377	39.901	1.00	29.84	A	O
ATOM	3390	N	LEU	605	29.725	22.490	40.171	1.00	31.13	A	N
ATOM	3391	CA	LEU	605	28.888	22.074	41.293	1.00	32.89	A	C
ATOM	3392	CB	LEU	605	27.935	20.947	40.871	1.00	33.11	A	C
ATOM	3393	CG	LEU	605	26.698	21.336	40.052	1.00	33.42	A	C
ATOM	3394	CD1	LEU	605	26.106	20.124	39.343	1.00	33.72	A	C
ATOM	3395	CD2	LEU	605	25.668	21.984	40.959	1.00	33.24	A	C
ATOM	3396	C	LEU	605	29.722	21.639	42.485	1.00	34.22	A	C
ATOM	3397	O	LEU	605	29.198	21.426	43.577	1.00	34.93	A	O
ATOM	3398	N	THR	606	31.024	21.508	42.274	1.00	35.20	A	N
ATOM	3399	CA	THR	606	31.916	21.098	43.344	1.00	36.25	A	C
ATOM	3400	CB	THR	606	32.988	20.119	42.831	1.00	36.55	A	C
ATOM	3401	OG1	THR	606	32.374	19.131	41.990	1.00	36.37	A	O
ATOM	3402	CG2	THR	606	33.680	19.430	44.005	1.00	37.07	A	C
ATOM	3403	C	THR	606	32.606	22.323	43.936	1.00	37.38	A	C
ATOM	3404	O	THR	606	33.111	23.179	43.198	1.00	37.09	A	O
ATOM	3405	N	ALA	607	32.572	22.422	45.267	1.00	38.34	A	N
ATOM	3406	CA	ALA	607	33.207	23.521	45.995	1.00	38.09	A	C
ATOM	3407	CB	ALA	607	32.255	24.100	47.027	1.00	37.25	A	C
ATOM	3408	C	ALA	607	34.436	22.958	46.678	1.00	38.64	A	C
ATOM	3409	O	ALA	607	34.495	21.773	46.980	1.00	38.68	A	O
ATOM	3410	N	PRO	608	35.443	23.797	46.923	1.00	40.14	A	N
ATOM	3411	CD	PRO	608	35.594	25.198	46.506	1.00	40.81	A	C
ATOM	3412	CA	PRO	608	36.660	23.315	47.579	1.00	41.87	A	C
ATOM	3413	CB	PRO	608	37.584	24.535	47.523	1.00	41.08	A	C
ATOM	3414	CG	PRO	608	37.085	25.296	46.339	1.00	41.51	A	C
ATOM	3415	C	PRO	608	36.403	22.900	49.021	1.00	43.79	A	C
ATOM	3416	O	PRO	608	36.814	21.820	49.461	1.00	44.15	A	O
ATOM	3417	N	ASP	609	35.673	23.746	49.736	1.00	45.64	A	N
ATOM	3418	CA	ASP	609	35.390	23.498	51.130	1.00	47.80	A	C

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ATOM	3419	CB	ASP	609	34.982	24.795	51.827	1.00	49.48	A	C
ATOM	3420	CG	ASP	609	36.189	25.606	52.296	1.00	50.36	A	C
ATOM	3421	OD1	ASP	609	36.866	25.159	53.251	1.00	50.02	A	O
ATOM	3422	OD2	ASP	609	36.464	26.681	51.712	1.00	49.89	A	O
ATOM	3423	C	ASP	609	34.429	22.375	51.460	1.00	48.74	A	C
ATOM	3424	O	ASP	609	34.255	22.052	52.631	1.00	49.61	A	O
ATOM	3425	N	GLU	610	33.835	21.752	50.444	1.00	49.40	A	N
ATOM	3426	CA	GLU	610	32.905	20.645	50.678	1.00	50.30	A	C
ATOM	3427	CB	GLU	610	31.970	20.443	49.480	1.00	52.03	A	C
ATOM	3428	CG	GLU	610	31.100	21.663	49.141	1.00	56.31	A	C
ATOM	3429	CD	GLU	610	30.441	22.324	50.368	1.00	58.34	A	C
ATOM	3430	OE1	GLU	610	30.815	23.478	50.697	1.00	57.08	A	O
ATOM	3431	OE2	GLU	610	29.541	21.704	50.987	1.00	59.30	A	O
ATOM	3432	C	GLU	610	33.646	19.349	51.008	1.00	49.70	A	C
ATOM	3433	O	GLU	610	34.572	18.957	50.300	1.00	49.90	A	O
ATOM	3434	N	ASN	611	33.252	18.708	52.107	1.00	49.28	A	N
ATOM	3435	CA	ASN	611	33.877	17.465	52.554	1.00	49.21	A	C
ATOM	3436	CB	ASN	611	33.701	17.285	54.073	1.00	51.84	A	C
ATOM	3437	CG	ASN	611	34.736	18.085	54.898	1.00	54.05	A	C
ATOM	3438	OD1	ASN	611	34.422	19.141	55.474	1.00	53.00	A	O
ATOM	3439	ND2	ASN	611	35.968	17.565	54.971	1.00	54.57	A	N
ATOM	3440	C	ASN	611	33.357	16.243	51.801	1.00	48.03	A	C
ATOM	3441	O	ASN	611	32.185	16.196	51.425	1.00	48.47	A	O
ATOM	3442	N	ILE	612	34.239	15.256	51.620	1.00	45.61	A	N
ATOM	3443	CA	ILE	612	33.963	14.011	50.895	1.00	43.44	A	C
ATOM	3444	CB	ILE	612	34.833	12.843	51.425	1.00	43.30	A	C
ATOM	3445	CG2	ILE	612	34.409	11.516	50.780	1.00	41.89	A	C
ATOM	3446	CG1	ILE	612	36.315	13.155	51.144	1.00	43.01	A	C
ATOM	3447	CD1	ILE	612	37.303	12.115	51.638	1.00	43.15	A	C
ATOM	3448	C	ILE	612	32.505	13.591	50.688	1.00	43.00	A	C
ATOM	3449	O	ILE	612	32.078	13.425	49.545	1.00	43.67	A	O
ATOM	3450	N	PRO	613	31.729	13.385	51.773	1.00	41.97	A	N
ATOM	3451	CD	PRO	613	32.117	13.212	53.187	1.00	42.18	A	C
ATOM	3452	CA	PRO	613	30.325	12.993	51.582	1.00	40.19	A	C
ATOM	3453	CB	PRO	613	29.794	12.954	53.014	1.00	39.85	A	C
ATOM	3454	CG	PRO	613	30.956	12.398	53.756	1.00	39.91	A	C
ATOM	3455	C	PRO	613	29.527	13.962	50.701	1.00	38.14	A	C
ATOM	3456	O	PRO	613	28.730	13.539	49.863	1.00	37.81	A	O
ATOM	3457	N	ALA	614	29.766	15.257	50.872	1.00	36.58	A	N
ATOM	3458	CA	ALA	614	29.061	16.262	50.088	1.00	36.08	A	C
ATOM	3459	CB	ALA	614	29.159	17.612	50.754	1.00	36.53	A	C
ATOM	3460	C	ALA	614	29.588	16.334	48.661	1.00	35.61	A	C
ATOM	3461	O	ALA	614	28.857	16.718	47.734	1.00	35.21	A	O
ATOM	3462	N	LYS	615	30.866	15.999	48.485	1.00	33.93	A	N
ATOM	3463	CA	LYS	615	31.452	16.008	47.152	1.00	32.44	A	C
ATOM	3464	CB	LYS	615	32.955	15.723	47.212	1.00	31.16	A	C
ATOM	3465	CG	LYS	615	33.779	17.006	47.189	1.00	31.47	A	C
ATOM	3466	CD	LYS	615	35.243	16.807	47.554	1.00	30.19	A	C
ATOM	3467	CE	LYS	615	35.938	18.155	47.617	1.00	30.37	A	C
ATOM	3468	NZ	LYS	615	37.301	18.106	48.219	1.00	31.19	A	N
ATOM	3469	C	LYS	615	30.719	14.997	46.264	1.00	31.41	A	C
ATOM	3470	O	LYS	615	30.499	15.245	45.077	1.00	31.78	A	O
ATOM	3471	N	ILE	616	30.262	13.904	46.872	1.00	29.36	A	N
ATOM	3472	CA	ILE	616	29.539	12.862	46.157	1.00	26.06	A	C
ATOM	3473	CB	ILE	616	29.518	11.560	46.977	1.00	24.59	A	C
ATOM	3474	CG2	ILE	616	28.595	10.536	46.364	1.00	22.82	A	C
ATOM	3475	CG1	ILE	616	30.938	11.006	47.050	1.00	23.22	A	C
ATOM	3476	CD1	ILE	616	31.110	9.905	48.029	1.00	25.94	A	C
ATOM	3477	C	ILE	616	28.143	13.334	45.765	1.00	26.24	A	C
ATOM	3478	O	ILE	616	27.641	12.944	44.716	1.00	26.31	A	O
ATOM	3479	N	LEU	617	27.536	14.196	46.587	1.00	26.87	A	N
ATOM	3480	CA	LEU	617	26.209	14.758	46.285	1.00	26.27	A	C
ATOM	3481	CB	LEU	617	25.805	15.829	47.332	1.00	28.00	A	C

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ATOM	3482	CG	LEU	617	24.568	16.793	47.310	1.00	29.49	A	C
ATOM	3483	CD1	LEU	617	24.744	17.803	48.444	1.00	29.66	A	C
ATOM	3484	CD2	LEU	617	24.361	17.598	46.015	1.00	27.26	A	C
ATOM	3485	C	LEU	617	26.384	15.441	44.940	1.00	25.27	A	C
ATOM	3486	O	LEU	617	25.590	15.272	44.026	1.00	24.58	A	O
ATOM	3487	N	SER	618	27.472	16.189	44.834	1.00	24.77	A	N
ATOM	3488	CA	SER	618	27.783	16.947	43.638	1.00	23.65	A	C
ATOM	3489	CB	SER	618	29.053	17.768	43.873	1.00	23.32	A	C
ATOM	3490	OG	SER	618	29.024	18.344	45.172	1.00	21.98	A	O
ATOM	3491	C	SER	618	27.933	16.048	42.428	1.00	22.18	A	C
ATOM	3492	O	SER	618	27.387	16.349	41.366	1.00	23.04	A	O
ATOM	3493	N	TYR	619	28.637	14.931	42.598	1.00	19.73	A	N
ATOM	3494	CA	TYR	619	28.843	14.012	41.491	1.00	18.19	A	C
ATOM	3495	CB	TYR	619	29.809	12.889	41.859	1.00	14.82	A	C
ATOM	3496	CG	TYR	619	30.156	12.044	40.659	1.00	11.82	A	C
ATOM	3497	CD1	TYR	619	31.221	12.386	39.838	1.00	9.80	A	C
ATOM	3498	CE1	TYR	619	31.505	11.668	38.713	1.00	7.37	A	C
ATOM	3499	CD2	TYR	619	29.385	10.943	40.310	1.00	9.33	A	C
ATOM	3500	CE2	TYR	619	29.664	10.220	39.190	1.00	8.93	A	C
ATOM	3501	CZ	TYR	619	30.725	10.590	38.394	1.00	9.48	A	C
ATOM	3502	OH	TYR	619	30.997	9.883	37.257	1.00	13.55	A	O
ATOM	3503	C	TYR	619	27.535	13.421	40.972	1.00	19.93	A	C
ATOM	3504	O	TYR	619	27.271	13.446	39.769	1.00	21.07	A	O
ATOM	3505	N	ASN	620	26.722	12.879	41.869	1.00	20.80	A	N
ATOM	3506	CA	ASN	620	25.453	12.310	41.455	1.00	22.21	A	C
ATOM	3507	CB	ASN	620	24.870	11.420	42.545	1.00	24.55	A	C
ATOM	3508	CG	ASN	620	25.850	10.370	43.024	1.00	27.30	A	C
ATOM	3509	OD1	ASN	620	26.196	10.334	44.207	1.00	29.03	A	O
ATOM	3510	ND2	ASN	620	26.313	9.515	42.110	1.00	26.27	A	N
ATOM	3511	C	ASN	620	24.467	13.409	41.118	1.00	22.63	A	C
ATOM	3512	O	ASN	620	23.345	13.134	40.721	1.00	24.58	A	O
ATOM	3513	N	ARG	621	24.882	14.654	41.307	1.00	23.63	A	N
ATOM	3514	CA	ARG	621	24.039	15.810	41.020	1.00	24.30	A	C
ATOM	3515	CB	ARG	621	24.362	16.950	41.981	1.00	26.38	A	C
ATOM	3516	CG	ARG	621	23.156	17.539	42.665	1.00	30.54	A	C
ATOM	3517	CD	ARG	621	22.284	18.323	41.697	1.00	34.20	A	C
ATOM	3518	NE	ARG	621	22.231	19.731	42.074	1.00	37.40	A	N
ATOM	3519	CZ	ARG	621	21.324	20.262	42.887	1.00	38.50	A	C
ATOM	3520	NH1	ARG	621	20.364	19.511	43.422	1.00	38.85	A	N
ATOM	3521	NH2	ARG	621	21.399	21.551	43.182	1.00	39.34	A	N
ATOM	3522	C	ARG	621	24.332	16.239	39.602	1.00	23.33	A	C
ATOM	3523	O	ARG	621	23.466	16.766	38.901	1.00	22.53	A	O
ATOM	3524	N	ALA	622	25.587	16.043	39.214	1.00	22.93	A	N
ATOM	3525	CA	ALA	622	26.056	16.362	37.878	1.00	22.92	A	C
ATOM	3526	CE	ALA	622	27.568	16.482	37.885	1.00	23.06	A	C
ATOM	3527	C	ALA	622	25.615	15.209	36.977	1.00	22.40	A	C
ATOM	3528	O	ALA	622	25.345	15.388	35.788	1.00	20.51	A	O
ATOM	3529	N	ASN	623	25.506	14.029	37.582	1.00	22.48	A	N
ATOM	3530	CA	ASN	623	25.103	12.828	36.867	1.00	22.50	A	C
ATOM	3531	CB	ASN	623	25.264	11.589	37.755	1.00	22.99	A	C
ATOM	3532	CG	ASN	623	25.655	10.353	36.965	1.00	23.67	A	C
ATOM	3533	OD1	ASN	623	26.478	9.561	37.413	1.00	26.00	A	O
ATOM	3534	ND2	ASN	623	25.078	10.193	35.779	1.00	22.29	A	N
ATOM	3535	C	ASN	623	23.665	12.968	36.417	1.00	21.84	A	C
ATOM	3536	O	ASN	623	23.325	12.611	35.290	1.00	20.93	A	O
ATOM	3537	N	ARG	624	22.837	13.516	37.300	1.00	21.80	A	N
ATOM	3538	CA	ARG	624	21.428	13.727	37.007	1.00	22.79	A	C
ATOM	3539	CB	ARG	624	20.694	14.268	38.239	1.00	23.83	A	C
ATOM	3540	CG	ARG	624	19.210	14.436	38.047	1.00	27.47	A	C
ATOM	3541	CD	ARG	624	18.590	15.210	39.180	1.00	32.66	A	C
ATOM	3542	NE	ARG	624	18.442	14.380	40.365	1.00	39.50	A	N
ATOM	3543	CZ	ARG	624	18.635	14.806	41.609	1.00	43.15	A	C
ATOM	3544	NH1	ARG	624	18.995	16.064	41.841	1.00	44.42	A	N

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ATOM	3545	NH2	ARG	624	18.431	13.980	42.628	1.00	44.36	A	N
ATOM	3546	C	ARG	624	21.280	14.675	35.815	1.00	22.84	A	C
ATOM	3547	O	ARG	624	20.476	14.431	34.920	1.00	23.10	A	O
ATOM	3548	N	ALA	625	22.105	15.717	35.765	1.00	22.67	A	N
ATOM	3549	CA	ALA	625	22.040	16.662	34.655	1.00	22.69	A	C
ATOM	3550	CB	ALA	625	23.109	17.744	34.800	1.00	21.78	A	C
ATOM	3551	C	ALA	625	22.207	15.912	33.339	1.00	22.32	A	C
ATOM	3552	O	ALA	625	21.461	16.146	32.401	1.00	23.37	A	O
ATOM	3553	N	VAL	626	23.144	14.967	33.303	1.00	22.26	A	N
ATOM	3554	CA	VAL	626	23.400	14.168	32.106	1.00	20.68	A	C
ATOM	3555	CB	VAL	626	24.775	13.452	32.171	1.00	21.81	A	C
ATOM	3556	CG1	VAL	626	25.014	12.631	30.925	1.00	18.92	A	C
ATOM	3557	CG2	VAL	626	25.880	14.469	32.297	1.00	23.25	A	C
ATOM	3558	C	VAL	626	22.310	13.132	31.930	1.00	19.40	A	C
ATOM	3559	O	VAL	626	21.951	12.797	30.812	1.00	19.19	A	O
ATOM	3560	N	ALA	627	21.780	12.629	33.037	1.00	19.85	A	N
ATOM	3561	CA	ALA	627	20.712	11.638	32.980	1.00	20.89	A	C
ATOM	3562	CB	ALA	627	20.507	10.990	34.343	1.00	18.99	A	C
ATOM	3563	C	ALA	627	19.414	12.276	32.497	1.00	22.12	A	C
ATOM	3564	O	ALA	627	18.405	11.602	32.383	1.00	23.86	A	O
ATOM	3565	N	ILE	628	19.442	13.579	32.223	0.00	23.32	A	N
ATOM	3566	CA	ILE	628	18.263	14.294	31.735	0.00	24.14	A	C
ATOM	3567	CB	ILE	628	18.145	15.713	32.382	0.00	24.35	A	C
ATOM	3568	CG2	ILE	628	17.704	16.760	31.362	0.00	24.26	A	C
ATOM	3569	CG1	ILE	628	17.140	15.690	33.538	0.00	24.39	A	C
ATOM	3570	CD1	ILE	628	17.509	14.772	34.672	0.00	24.68	A	C
ATOM	3571	C	ILE	628	18.276	14.394	30.207	0.00	24.44	A	C
ATOM	3572	O	ILE	628	17.244	14.208	29.558	0.00	24.62	A	O
ATOM	3573	N	LEU	629	19.448	14.675	29.641	0.00	25.26	A	N
ATOM	3574	CA	LEU	629	19.601	14.805	28.193	0.00	25.86	A	C
ATOM	3575	CB	LEU	629	21.030	15.223	27.841	0.00	26.10	A	C
ATOM	3576	CG	LEU	629	21.416	16.672	28.144	0.00	26.40	A	C
ATOM	3577	CD1	LEU	629	22.885	16.888	27.829	0.00	26.55	A	C
ATOM	3578	CD2	LEU	629	20.551	17.619	27.325	0.00	26.55	A	C
ATOM	3579	C	LEU	629	19.238	13.529	27.443	0.00	26.13	A	C
ATOM	3580	O	LEU	629	18.467	13.564	26.482	0.00	26.18	A	O
ATOM	3581	N	CYS	630	19.792	12.406	27.891	0.00	26.39	A	N
ATOM	3582	CA	CYS	630	19.533	11.112	27.271	0.00	26.14	A	C
ATOM	3583	CB	CYS	630	20.609	10.107	27.682	0.00	26.55	A	C
ATOM	3584	SG	CYS	630	22.277	10.564	27.161	0.00	26.75	A	S
ATOM	3585	C	CYS	630	18.144	10.570	27.606	0.00	26.09	A	C
ATOM	3586	O	CYS	630	17.777	9.470	27.187	0.00	26.14	A	O
ATOM	3587	N	ASN	631	17.382	11.364	28.354	1.00	25.88	A	N
ATOM	3588	CA	ASN	631	16.019	11.024	28.778	1.00	25.54	A	C
ATOM	3589	CB	ASN	631	15.044	11.110	27.589	1.00	25.87	A	C
ATOM	3590	CG	ASN	631	13.573	11.023	28.011	1.00	26.40	A	C
ATOM	3591	OD1	ASN	631	12.732	10.500	27.272	1.00	27.06	A	O
ATOM	3592	ND2	ASN	631	13.260	11.543	29.194	1.00	26.36	A	N
ATOM	3593	C	ASN	631	15.940	9.654	29.469	1.00	25.39	A	C
ATOM	3594	O	ASN	631	15.070	8.829	29.160	1.00	23.85	A	O
ATOM	3595	N	HIS	632	16.876	9.427	30.391	1.00	24.71	A	N
ATOM	3596	CA	HIS	632	16.955	8.192	31.157	1.00	24.68	A	C
ATOM	3597	CB	HIS	632	18.386	7.946	31.633	1.00	22.77	A	C
ATOM	3598	CG	HIS	632	19.333	7.550	30.541	1.00	22.85	A	C
ATOM	3599	CD2	HIS	632	19.110	7.042	29.306	1.00	22.14	A	C
ATOM	3600	ND1	HIS	632	20.702	7.667	30.666	1.00	22.65	A	N
ATOM	3601	CE1	HIS	632	21.278	7.252	29.552	1.00	22.59	A	C
ATOM	3602	NE2	HIS	632	20.336	6.866	28.711	1.00	21.93	A	N
ATOM	3603	C	HIS	632	16.021	8.227	32.358	1.00	26.23	A	C
ATOM	3604	O	HIS	632	16.379	8.744	33.413	1.00	25.68	A	O
ATOM	3605	N	GLN	633	14.830	7.656	32.196	1.00	29.54	A	N
ATOM	3606	CA	GLN	633	13.838	7.612	33.264	1.00	32.81	A	C
ATOM	3607	CB	GLN	633	12.443	7.913	32.724	1.00	32.81	A	C

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ATOM	3608	CG	GLN	633	12.300	9.342	32.242	1.00	35.79	A	C
ATOM	3609	CD	GLN	633	10.903	9.676	31.792	1.00	37.31	A	C
ATOM	3610	OE1	GLN	633	10.700	10.202	30.692	1.00	37.40	A	O
ATOM	3611	NE2	GLN	633	9.921	9.378	32.643	1.00	36.85	A	N
ATOM	3612	C	GLN	633	13.834	6.291	34.011	1.00	35.62	A	C
ATOM	3613	O	GLN	633	14.370	5.285	33.531	1.00	36.40	A	O
ATOM	3614	N	ALA	634	13.212	6.311	35.187	1.00	38.28	A	N
ATOM	3615	CA	ALA	634	13.108	5.158	36.074	1.00	40.65	A	C
ATOM	3616	CB	ALA	634	14.195	5.259	37.145	1.00	39.95	A	C
ATOM	3621	C	GLN	634	11.738	5.238	36.722	1.00	43.86	A	C
ATOM	3622	O	GLN	634	11.435	6.218	37.391	1.00	44.04	A	O
ATOM	3623	N	ALA	635	10.917	4.211	36.517	1.00	47.67	A	N
ATOM	3624	CA	ALA	635	9.566	4.159	37.079	1.00	51.79	A	C
ATOM	3625	CB	ALA	635	8.882	2.854	36.689	1.00	50.78	A	C
ATOM	3626	C	ALA	635	9.559	4.317	38.597	1.00	54.44	A	C
ATOM	3627	O	ALA	635	10.160	3.511	39.313	1.00	54.48	A	O
ATOM	3628	N	PRO	636	8.850	5.344	39.106	1.00	57.21	A	N
ATOM	3629	CD	PRO	636	8.013	6.281	38.334	1.00	57.72	A	C
ATOM	3630	CA	PRO	636	8.749	5.628	40.541	1.00	59.91	A	C
ATOM	3631	CB	PRO	636	7.651	6.687	40.597	1.00	59.49	A	C
ATOM	3632	CG	PRO	636	7.831	7.416	39.303	1.00	58.60	A	C
ATOM	3633	C	PRO	636	8.359	4.371	41.312	1.00	62.21	A	C
ATOM	3634	O	PRO	636	7.307	3.787	41.062	1.00	62.76	A	O
ATOM	3635	N	PRO	637	9.225	3.931	42.243	1.00	64.19	A	N
ATOM	3636	CD	PRO	637	10.486	4.614	42.589	1.00	65.33	A	C
ATOM	3637	CA	PRO	637	9.037	2.742	43.081	1.00	65.62	A	C
ATOM	3638	CB	PRO	637	10.066	2.947	44.189	1.00	66.18	A	C
ATOM	3639	CG	PRO	637	11.194	3.585	43.453	1.00	66.22	A	C
ATOM	3640	C	PRO	637	7.632	2.567	43.634	1.00	66.64	A	C
ATOM	3641	O	PRO	637	6.932	3.546	43.914	1.00	65.74	A	O
ATOM	3642	N	ALA	638	7.242	1.302	43.783	1.00	68.34	A	N
ATOM	3643	CA	ALA	638	5.925	0.917	44.283	1.00	70.63	A	C
ATOM	3644	CB	ALA	638	5.877	-0.600	44.511	1.00	69.87	A	C
ATOM	3645	C	ALA	638	5.527	1.664	45.556	1.00	71.94	A	C
ATOM	3646	O	ALA	638	4.788	2.650	45.504	1.00	72.42	A	O
ATOM	3647	N	ALA	639	6.036	1.196	46.691	1.00	73.63	A	N
ATOM	3648	CA	ALA	639	5.747	1.804	47.982	1.00	74.59	A	C
ATOM	3649	CB	ALA	639	5.278	0.739	48.969	1.00	74.23	A	C
ATOM	3650	C	ALA	639	6.967	2.533	48.535	1.00	75.04	A	C
ATOM	3651	O	ALA	639	6.832	3.588	49.151	1.00	75.65	A	O
ATOM	3652	N	ALA	640	8.154	1.980	48.290	1.00	75.14	A	N
ATOM	3653	CA	ALA	640	9.409	2.560	48.768	1.00	75.35	A	C
ATOM	3654	CB	ALA	640	10.596	1.772	48.211	1.00	74.87	A	C
ATOM	3655	C	ALA	640	9.590	4.070	48.509	1.00	75.82	A	C
ATOM	3656	O	ALA	640	10.282	4.749	49.283	1.00	75.56	A	O
ATOM	3657	N	GLU	641	8.971	4.593	47.441	1.00	75.91	A	N
ATOM	3658	CA	GLU	641	9.075	6.024	47.110	1.00	75.67	A	C
ATOM	3659	CB	GLU	641	9.170	6.271	45.601	1.00	75.24	A	C
ATOM	3660	CG	GLU	641	10.498	6.910	45.133	1.00	74.13	A	C
ATOM	3661	CD	GLU	641	10.860	8.228	45.828	1.00	72.65	A	C
ATOM	3662	OE1	GLU	641	9.993	9.120	45.966	1.00	69.73	A	O
ATOM	3663	OE2	GLU	641	12.039	8.374	46.218	1.00	71.68	A	O
ATOM	3664	C	GLU	641	7.953	6.878	47.675	1.00	75.46	A	C
ATOM	3665	O	GLU	641	7.857	8.066	47.363	1.00	75.68	A	O
ATOM	3666	N	LYS	642	7.072	6.253	48.448	1.00	75.11	A	N
ATOM	3667	CA	LYS	642	5.976	6.962	49.094	1.00	74.84	A	C
ATOM	3668	CB	LYS	642	4.620	6.351	48.718	1.00	75.13	A	C
ATOM	3669	CG	LYS	642	3.496	7.380	48.579	1.00	75.05	A	C
ATOM	3670	CD	LYS	642	3.180	8.083	49.898	1.00	74.86	A	C
ATOM	3671	CE	LYS	642	2.400	9.379	49.691	1.00	74.62	A	C
ATOM	3672	NZ	LYS	642	3.193	10.438	48.990	1.00	73.45	A	N
ATOM	3673	C	LYS	642	6.237	6.844	50.596	1.00	74.36	A	C
ATOM	3674	O	LYS	642	5.620	7.530	51.405	1.00	74.14	A	O



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ATOM	3675	N	SER	643	7.161	5.956	50.956	1.00	74.47	A	N
ATOM	3676	CA	SER	643	7.544	5.760	52.349	1.00	74.75	A	C
ATOM	3677	CB	SER	643	7.999	4.316	52.596	1.00	74.77	A	C
ATOM	3678	OG	SER	643	9.169	4.010	51.861	1.00	75.92	A	O
ATOM	3679	C	SER	643	8.668	6.758	52.679	1.00	74.95	A	C
ATOM	3680	O	SER	643	9.749	6.384	53.155	1.00	74.03	A	O
ATOM	3681	N	MET	644	8.409	8.023	52.342	1.00	74.84	A	N
ATOM	3682	CA	MET	644	9.326	9.125	52.595	1.00	73.88	A	C
ATOM	3683	CB	MET	644	9.213	10.174	51.482	1.00	73.04	A	C
ATOM	3684	CG	MET	644	10.337	11.198	51.473	1.00	72.66	A	C
ATOM	3685	SD	MET	644	11.089	11.419	49.850	1.00	71.65	A	S
ATOM	3686	CE	MET	644	11.861	9.797	49.603	1.00	71.32	A	C
ATOM	3687	C	MET	644	8.949	9.714	53.960	1.00	74.28	A	C
ATOM	3688	O	MET	644	9.569	10.665	54.440	1.00	73.87	A	O
ATOM	3689	N	MET	645	7.903	9.146	54.561	1.00	74.74	A	N
ATOM	3690	CA	MET	645	7.433	9.544	55.886	1.00	75.14	A	C
ATOM	3691	CB	MET	645	6.062	8.931	56.177	1.00	76.24	A	C
ATOM	3692	CG	MET	645	4.955	9.375	55.244	1.00	77.88	A	C
ATOM	3693	SD	MET	645	3.412	8.491	55.583	1.00	80.54	A	S
ATOM	3694	CE	MET	645	2.505	9.712	56.565	1.00	78.97	A	C
ATOM	3695	C	MET	645	8.446	8.990	56.886	1.00	74.63	A	C
ATOM	3696	O	MET	645	8.593	9.506	57.993	1.00	74.79	A	O
ATOM	3697	N	ASN	646	9.112	7.909	56.487	1.00	73.82	A	N
ATOM	3698	CA	ASN	646	10.132	7.267	57.303	1.00	73.32	A	C
ATOM	3699	CB	ASN	646	10.431	5.864	56.772	1.00	74.26	A	C
ATOM	3700	CG	ASN	646	9.236	4.928	56.891	1.00	76.31	A	C
ATOM	3701	OD1	ASN	646	8.087	5.326	56.669	1.00	76.63	A	O
ATOM	3702	ND2	ASN	646	9.502	3.675	57.249	1.00	77.53	A	N
ATOM	3703	C	ASN	646	11.388	8.133	57.291	1.00	72.54	A	C
ATOM	3704	O	ASN	646	12.184	8.106	58.232	1.00	73.08	A	O
ATOM	3705	N	LEU	647	11.570	8.887	56.210	1.00	70.80	A	N
ATOM	3706	CA	LEU	647	12.703	9.794	56.095	1.00	68.45	A	C
ATOM	3707	CB	LEU	647	12.941	10.195	54.643	1.00	68.81	A	C
ATOM	3708	CG	LEU	647	14.327	9.864	54.093	1.00	69.39	A	C
ATOM	3709	CD1	LEU	647	14.429	10.351	52.651	1.00	70.02	A	C
ATOM	3710	CD2	LEU	647	15.413	10.494	54.962	1.00	68.94	A	C
ATOM	3711	C	LEU	647	12.365	11.027	56.926	1.00	67.06	A	C
ATOM	3712	O	LEU	647	13.251	11.768	57.338	1.00	66.80	A	O
ATOM	3713	N	GLN	648	11.071	11.252	57.139	1.00	65.57	A	N
ATOM	3714	CA	GLN	648	10.611	12.372	57.950	1.00	64.20	A	C
ATOM	3715	CB	GLN	648	9.149	12.724	57.651	1.00	63.67	A	C
ATOM	3716	CG	GLN	648	8.963	13.677	56.483	1.00	62.94	A	C
ATOM	3717	CD	GLN	648	9.656	15.007	56.699	1.00	61.67	A	C
ATOM	3718	OE1	GLN	648	9.346	15.733	57.638	1.00	61.77	A	O
ATOM	3719	NE2	GLN	648	10.504	15.329	55.829	1.00	61.26	A	N
ATOM	3720	C	GLN	648	10.763	12.016	59.421	1.00	63.18	A	C
ATOM	3721	O	GLN	648	11.114	12.869	60.234	1.00	63.21	A	O
ATOM	3722	N	THR	649	10.507	10.753	59.759	1.00	61.58	A	N
ATOM	3723	CA	THR	649	10.632	10.308	61.140	1.00	60.00	A	C
ATOM	3724	CB	THR	649	10.225	8.828	61.321	1.00	60.34	A	C
ATOM	3725	OG1	THR	649	11.121	7.990	60.586	1.00	61.32	A	O
ATOM	3726	CG2	THR	649	8.796	8.592	60.843	1.00	59.42	A	C
ATOM	3727	C	THR	649	12.078	10.503	61.587	1.00	58.62	A	C
ATOM	3728	O	THR	649	12.331	11.060	62.653	1.00	58.98	A	O
ATOM	3729	N	LYS	650	13.020	10.101	60.735	1.00	56.55	A	N
ATOM	3730	CA	LYS	650	14.444	10.238	61.033	1.00	54.77	A	C
ATOM	3731	CB	LYS	650	15.292	9.690	59.882	1.00	54.49	A	C
ATOM	3732	CG	LYS	650	15.257	8.178	59.727	1.00	55.02	A	C
ATOM	3733	CD	LYS	650	16.315	7.712	58.735	1.00	56.18	A	C
ATOM	3734	CE	LYS	650	16.438	6.192	58.699	1.00	56.88	A	C
ATOM	3735	NZ	LYS	650	17.563	5.751	57.825	1.00	56.13	A	N
ATOM	3736	C	LYS	650	14.802	11.696	61.265	1.00	53.55	A	C
ATOM	3737	O	LYS	650	15.475	12.040	62.238	1.00	52.61	A	O

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ATOM	3738	N	ILE	651	14.344	12.537	60.343	1.00	53.04	A	N
ATOM	3739	CA	ILE	651	14.575	13.973	60.377	1.00	52.48	A	C
ATOM	3740	CB	ILE	651	13.984	14.658	59.123	1.00	52.30	A	C
ATOM	3741	CG2	ILE	651	13.829	16.157	59.342	1.00	52.13	A	C
ATOM	3742	CG1	ILE	651	14.858	14.370	57.903	1.00	52.13	A	C
ATOM	3743	CD1	ILE	651	14.288	14.914	56.613	1.00	51.70	A	C
ATOM	3744	C	ILE	651	13.944	14.580	61.608	1.00	52.44	A	C
ATOM	3745	O	ILE	651	14.619	15.232	62.394	1.00	53.16	A	O
ATOM	3746	N	ASP	652	12.649	14.356	61.781	1.00	52.68	A	N
ATOM	3747	CA	ASP	652	11.941	14.903	62.927	1.00	53.08	A	C
ATOM	3748	CB	ASP	652	10.441	14.610	62.816	1.00	54.48	A	C
ATOM	3749	CG	ASP	652	9.804	15.269	61.590	1.00	56.11	A	C
ATOM	3750	OD1	ASP	652	10.299	16.337	61.148	1.00	55.52	A	O
ATOM	3751	OD2	ASP	652	8.807	14.714	61.065	1.00	57.03	A	O
ATOM	3752	C	ASP	652	12.518	14.403	64.253	1.00	52.72	A	C
ATOM	3753	O	ASP	652	12.421	15.089	65.273	1.00	53.25	A	O
ATOM	3754	N	ALA	653	13.145	13.225	64.226	1.00	51.56	A	N
ATOM	3755	CA	ALA	653	13.766	12.641	65.415	1.00	49.72	A	C
ATOM	3756	CB	ALA	653	14.005	11.152	65.215	1.00	48.63	A	C
ATOM	3757	C	ALA	653	15.086	13.351	65.707	1.00	48.48	A	C
ATOM	3758	O	ALA	653	15.456	13.551	66.860	1.00	48.54	A	O
ATOM	3759	N	LYS	654	15.785	13.734	64.648	1.00	47.60	A	N
ATOM	3760	CA	LYS	654	17.054	14.427	64.769	1.00	47.61	A	C
ATOM	3761	CB	LYS	654	17.842	14.289	63.470	1.00	45.37	A	C
ATOM	3762	CG	LYS	654	19.255	14.809	63.557	1.00	43.85	A	C
ATOM	3763	CD	LYS	654	20.104	13.970	64.493	1.00	41.16	A	C
ATOM	3764	CE	LYS	654	20.315	12.578	63.932	1.00	39.27	A	C
ATOM	3765	NZ	LYS	654	21.327	11.827	64.703	1.00	36.48	A	N
ATOM	3766	C	LYS	654	16.846	15.907	65.114	1.00	49.14	A	C
ATOM	3767	O	LYS	654	17.711	16.539	65.717	1.00	49.88	A	O
ATOM	3768	N	LYS	655	15.711	16.467	64.709	1.00	51.01	A	N
ATOM	3769	CA	LYS	655	15.413	17.866	65.012	1.00	52.54	A	C
ATOM	3770	CB	LYS	655	14.130	18.329	64.316	1.00	53.51	A	C
ATOM	3771	CG	LYS	655	14.319	18.848	62.900	1.00	54.83	A	C
ATOM	3772	CD	LYS	655	12.978	19.259	62.304	1.00	55.42	A	C
ATOM	3773	CE	LYS	655	13.144	19.777	60.889	1.00	56.02	A	C
ATOM	3774	NZ	LYS	655	11.822	19.950	60.239	1.00	56.23	A	N
ATOM	3775	C	LYS	655	15.244	18.019	66.511	1.00	52.44	A	C
ATOM	3776	O	LYS	655	15.585	19.055	67.076	1.00	52.98	A	O
ATOM	3777	N	GLU	656	14.693	16.984	67.143	1.00	52.53	A	N
ATOM	3778	CA	GLU	656	14.479	16.995	68.580	1.00	52.40	A	C
ATOM	3779	CB	GLU	656	13.342	16.056	68.989	1.00	52.71	A	C
ATOM	3780	CG	GLU	656	11.973	16.531	68.489	1.00	55.88	A	C
ATOM	3781	CD	GLU	656	11.911	18.054	68.230	1.00	58.19	A	C
ATOM	3782	OE1	GLU	656	12.234	18.846	69.146	1.00	59.47	A	O
ATOM	3783	OE2	GLU	656	11.547	18.463	67.100	1.00	58.48	A	O
ATOM	3784	C	GLU	656	15.759	16.712	69.331	1.00	52.04	A	C
ATOM	3785	O	GLU	656	15.915	17.131	70.475	1.00	52.29	A	O
ATOM	3786	N	GLN	657	16.676	15.995	68.688	1.00	51.90	A	N
ATOM	3787	CA	GLN	657	17.973	15.733	69.295	1.00	52.54	A	C
ATOM	3788	CB	GLN	657	18.789	14.726	68.474	1.00	52.87	A	C
ATOM	3789	CG	GLN	657	18.372	13.265	68.627	1.00	54.13	A	C
ATOM	3790	CD	GLN	657	19.309	12.304	67.893	1.00	54.97	A	C
ATOM	3791	OE1	GLN	657	20.494	12.593	67.703	1.00	55.86	A	O
ATOM	3792	NE2	GLN	657	18.781	11.151	67.486	1.00	54.64	A	N
ATOM	3793	C	GLN	657	18.660	17.095	69.250	1.00	52.67	A	C
ATOM	3794	O	GLN	657	19.394	17.474	70.161	1.00	53.15	A	O
ATOM	3795	N	LEU	658	18.375	17.841	68.187	1.00	52.62	A	N
ATOM	3796	CA	LEU	658	18.942	19.163	67.999	1.00	52.52	A	C
ATOM	3797	CB	LEU	658	18.550	19.728	66.633	1.00	53.30	A	C
ATOM	3798	CG	LEU	658	19.369	20.949	66.212	1.00	53.56	A	C
ATOM	3799	CD1	LEU	658	20.755	20.473	65.794	1.00	52.65	A	C
ATOM	3800	CD2	LEU	658	18.678	21.705	65.077	1.00	54.37	A	C

ATOM	3801	C	LEU	658	18.398	20.063	69.084	1.00	52.09	A	C
ATOM	3802	O	LEU	658	19.142	20.806	69.709	1.00	52.68	A	O
ATOM	3803	N	ALA	659	17.090	19.985	69.299	1.00	52.07	A	N
ATOM	3804	CA	ALA	659	16.425	20.786	70.314	1.00	52.73	A	C
ATOM	3805	CB	ALA	659	14.932	20.452	70.351	1.00	52.50	A	C
ATOM	3806	C	ALA	659	17.058	20.571	71.693	1.00	53.49	A	C
ATOM	3807	O	ALA	659	17.454	21.535	72.355	1.00	53.00	A	O
ATOM	3808	N	ASP	660	17.184	19.306	72.098	1.00	54.21	A	N
ATOM	3809	CA	ASP	660	17.765	18.954	73.396	1.00	54.96	A	C
ATOM	3810	CB	ASP	660	17.760	17.427	73.618	1.00	56.22	A	C
ATOM	3811	CG	ASP	660	16.407	16.884	74.096	1.00	57.01	A	C
ATOM	3812	OD1	ASP	660	15.483	17.678	74.391	1.00	57.38	A	O
ATOM	3813	OD2	ASP	660	16.278	15.640	74.185	1.00	56.75	A	O
ATOM	3814	C	ASP	660	19.188	19.479	73.576	1.00	54.79	A	C
ATOM	3815	O	ASP	660	19.586	19.820	74.688	1.00	54.84	A	O
ATOM	3816	N	ALA	661	19.952	19.533	72.488	1.00	54.14	A	N
ATOM	3817	CA	ALA	661	21.328	20.008	72.552	1.00	54.68	A	C
ATOM	3818	CB	ALA	661	22.108	19.506	71.361	1.00	53.72	A	C
ATOM	3819	C	ALA	661	21.426	21.531	72.667	1.00	55.34	A	C
ATOM	3820	O	ALA	661	22.423	22.057	73.173	1.00	55.50	A	O
ATOM	3821	N	ARG	662	20.394	22.229	72.191	1.00	56.31	A	N
ATOM	3822	CA	ARG	662	20.339	23.690	72.255	1.00	57.27	A	C
ATOM	3823	CB	ARG	662	19.196	24.236	71.390	1.00	58.80	A	C
ATOM	3824	CG	ARG	662	19.346	24.023	69.887	1.00	61.54	A	C
ATOM	3825	CD	ARG	662	20.321	25.011	69.222	1.00	63.90	A	C
ATOM	3826	NE	ARG	662	20.326	24.866	67.761	1.00	65.45	A	N
ATOM	3827	CZ	ARG	662	19.388	25.348	66.943	1.00	65.82	A	C
ATOM	3828	NH1	ARG	662	18.358	26.034	67.426	1.00	65.57	A	N
ATOM	3829	NH2	ARG	662	19.437	25.072	65.645	1.00	64.88	A	N
ATOM	3830	C	ARG	662	20.098	24.092	73.704	1.00	56.97	A	C
ATOM	3831	O	ARG	662	20.560	25.140	74.149	1.00	57.06	A	O
ATOM	3832	N	ARG	663	19.339	23.262	74.418	1.00	56.91	A	N
ATOM	3833	CA	ARG	663	19.028	23.488	75.825	1.00	57.14	A	C
ATOM	3834	CB	ARG	663	17.767	22.724	76.231	1.00	56.42	A	C
ATOM	3835	CG	ARG	663	16.538	23.001	75.391	1.00	55.05	A	C
ATOM	3836	CD	ARG	663	15.365	22.157	75.865	1.00	53.88	A	C
ATOM	3837	NE	ARG	663	14.204	22.285	74.987	1.00	54.09	A	N
ATOM	3838	CZ	ARG	663	13.864	21.400	74.053	1.00	53.76	A	C
ATOM	3839	NH1	ARG	663	14.592	20.308	73.863	1.00	53.14	A	N
ATOM	3840	NH2	ARG	663	12.785	21.603	73.311	1.00	54.13	A	N
ATOM	3841	C	ARG	663	20.197	23.014	76.687	1.00	58.27	A	C
ATOM	3842	O	ARG	663	20.454	23.580	77.750	1.00	58.44	A	O
ATOM	3843	N	ASP	664	20.870	21.950	76.244	1.00	59.45	A	N
ATOM	3844	CA	ASP	664	22.029	21.402	76.952	1.00	61.23	A	C
ATOM	3845	CB	ASP	664	22.531	20.108	76.280	1.00	63.03	A	C
ATOM	3846	CG	ASP	664	22.173	18.834	77.066	1.00	64.55	A	C
ATOM	3847	OD1	ASP	664	22.746	18.606	78.153	1.00	64.09	A	O
ATOM	3848	OD2	ASP	664	21.342	18.038	76.567	1.00	65.78	A	O
ATOM	3849	C	ASP	664	23.142	22.450	76.932	1.00	61.57	A	C
ATOM	3850	O	ASP	664	23.993	22.487	77.825	1.00	61.31	A	O
ATOM	3851	N	LEU	665	23.127	23.286	75.893	1.00	62.04	A	N
ATOM	3852	CA	LEU	665	24.101	24.361	75.717	1.00	62.65	A	C
ATOM	3853	CB	LEU	665	24.225	24.706	74.228	1.00	62.67	A	C
ATOM	3854	CG	LEU	665	25.254	25.753	73.784	1.00	63.58	A	C
ATOM	3855	CD1	LEU	665	26.663	25.330	74.178	1.00	63.59	A	C
ATOM	3856	CD2	LEU	665	25.168	25.945	72.282	1.00	63.16	A	C
ATOM	3857	C	LEU	665	23.680	25.600	76.526	1.00	63.01	A	C
ATOM	3858	O	LEU	665	24.508	26.250	77.165	1.00	62.37	A	O
ATOM	3859	N	LYS	666	22.383	25.895	76.506	1.00	63.86	A	N
ATOM	3860	CA	LYS	666	21.806	27.029	77.225	1.00	64.92	A	C
ATOM	3861	CB	LYS	666	20.294	27.068	76.998	1.00	64.55	A	C
ATOM	3862	CG	LYS	666	19.565	28.257	77.601	1.00	63.80	A	C
ATOM	3863	CD	LYS	666	19.098	29.191	76.506	1.00	63.75	A	C

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ATOM	3864	CE	LYS	666	17.987	30.108	76.981	1.00	63.65	A	C
ATOM	3865	NZ	LYS	666	17.521	30.993	75.874	1.00	62.40	A	N
ATOM	3866	C	LYS	666	22.093	26.962	78.727	1.00	66.26	A	C
ATOM	3867	O	LYS	666	22.641	27.906	79.292	1.00	67.47	A	O
ATOM	3868	N	SER	667	21.713	25.858	79.371	1.00	67.19	A	N
ATOM	3869	CA	SER	667	21.940	25.693	80.811	1.00	68.29	A	C
ATOM	3870	CB	SER	667	21.302	24.398	81.332	1.00	69.19	A	C
ATOM	3871	OG	SER	667	22.045	23.251	80.942	1.00	70.38	A	O
ATOM	3872	C	SER	667	23.425	25.697	81.165	1.00	68.24	A	C
ATOM	3873	O	SER	667	23.787	26.000	82.297	1.00	67.67	A	O
ATOM	3874	N	ALA	668	24.270	25.320	80.206	1.00	68.68	A	N
ATOM	3875	CA	ALA	668	25.716	25.297	80.418	1.00	69.72	A	C
ATOM	3876	CB	ALA	668	26.415	24.596	79.259	1.00	69.55	A	C
ATOM	3877	C	ALA	668	26.220	26.727	80.552	1.00	70.55	A	C
ATOM	3878	O	ALA	668	27.022	27.036	81.435	1.00	69.77	A	O
ATOM	3879	N	LYS	669	25.722	27.593	79.675	1.00	72.40	A	N
ATOM	3880	CA	LYS	669	26.083	29.005	79.670	1.00	74.48	A	C
ATOM	3881	CB	LYS	669	25.548	29.688	78.406	1.00	75.10	A	C
ATOM	3882	CG	LYS	669	26.234	29.239	77.117	1.00	76.48	A	C
ATOM	3883	CD	LYS	669	25.946	30.205	75.971	1.00	77.29	A	C
ATOM	3884	CE	LYS	669	26.975	30.066	74.859	1.00	77.22	A	C
ATOM	3885	NZ	LYS	669	27.010	31.279	73.994	1.00	78.16	A	N
ATOM	3886	C	LYS	669	25.591	29.746	80.922	1.00	75.69	A	C
ATOM	3887	O	LYS	669	26.374	30.428	81.589	1.00	76.25	A	O
ATOM	3888	N	ALA	670	24.305	29.596	81.246	1.00	76.71	A	N
ATOM	3889	CA	ALA	670	23.711	30.244	82.421	1.00	77.16	A	C
ATOM	3890	CB	ALA	670	22.253	29.821	82.582	1.00	76.04	A	C
ATOM	3891	C	ALA	670	24.498	29.900	83.680	1.00	77.70	A	C
ATOM	3892	O	ALA	670	24.584	30.703	84.609	1.00	78.18	A	O
ATOM	3893	N	ASP	671	25.084	28.705	83.684	1.00	78.24	A	N
ATOM	3894	CA	ASP	671	25.878	28.222	84.805	1.00	78.72	A	C
ATOM	3895	CB	ASP	671	25.922	26.689	84.808	1.00	78.26	A	C
ATOM	3896	CG	ASP	671	26.326	26.112	86.157	1.00	78.01	A	C
ATOM	3897	OD1	ASP	671	27.248	25.265	86.200	1.00	77.15	A	O
ATOM	3898	OD2	ASP	671	25.706	26.493	87.173	1.00	77.50	A	O
ATOM	3899	C	ASP	671	27.288	28.777	84.694	1.00	79.06	A	C
ATOM	3900	O	ASP	671	27.895	29.137	85.700	1.00	79.71	A	O
ATOM	3901	N	ALA	672	27.791	28.861	83.464	1.00	79.38	A	N
ATOM	3902	CA	ALA	672	29.132	29.374	83.201	1.00	79.74	A	C
ATOM	3903	CB	ALA	672	29.534	29.080	81.771	1.00	79.12	A	C
ATOM	3904	C	ALA	672	29.281	30.869	83.493	1.00	80.69	A	C
ATOM	3905	O	ALA	672	30.398	31.386	83.498	1.00	80.75	A	O
ATOM	3906	N	LYS	673	28.164	31.556	83.740	1.00	81.79	A	N
ATOM	3907	CA	LYS	673	28.192	32.990	84.041	1.00	83.03	A	C
ATOM	3908	CB	LYS	673	26.814	33.625	83.835	1.00	83.61	A	C
ATOM	3909	CG	LYS	673	26.313	33.522	82.407	1.00	84.93	A	C
ATOM	3910	CD	LYS	673	27.408	33.875	81.402	1.00	85.20	A	C
ATOM	3911	CE	LYS	673	26.984	33.526	79.984	1.00	85.90	A	C
ATOM	3912	NZ	LYS	673	28.075	33.753	78.999	1.00	85.99	A	N
ATOM	3913	C	LYS	673	28.714	33.291	85.446	1.00	83.44	A	C
ATOM	3914	O	LYS	673	28.824	34.454	85.848	1.00	83.39	A	O
ATOM	3915	N	VAL	674	29.031	32.231	86.185	1.00	84.08	A	N
ATOM	3916	CA	VAL	674	29.581	32.347	87.531	1.00	84.34	A	C
ATOM	3917	CB	VAL	674	29.357	31.041	88.340	1.00	83.21	A	C
ATOM	3918	CG1	VAL	674	27.869	30.780	88.515	1.00	82.20	A	C
ATOM	3919	CG2	VAL	674	29.998	29.873	87.638	1.00	81.68	A	C
ATOM	3920	C	VAL	674	31.083	32.675	87.417	1.00	85.33	A	C
ATOM	3921	O	VAL	674	31.778	32.843	88.418	1.00	85.62	A	O
ATOM	3922	N	MET	675	31.556	32.764	86.174	1.00	86.35	A	N
ATOM	3923	CA	MET	675	32.941	33.090	85.841	1.00	87.31	A	C
ATOM	3924	CB	MET	675	33.326	34.445	86.450	1.00	88.20	A	C
ATOM	3925	CG	MET	675	32.615	35.643	85.812	1.00	89.19	A	C
ATOM	3926	SD	MET	675	33.589	36.490	84.532	1.00	89.67	A	S

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ATOM	3927	CE	MET	675	33.780	38.137	85.278	1.00	88.86	A	C
ATOM	3928	C	MET	675	33.995	32.027	86.161	1.00	87.58	A	C
ATOM	3929	O	MET	675	35.136	32.129	85.704	1.00	87.60	A	O
ATOM	3930	N	LYS	676	33.614	30.994	86.908	1.00	87.96	A	N
ATOM	3931	CA	LYS	676	34.556	29.934	87.261	1.00	88.73	A	C
ATOM	3932	CB	LYS	676	34.072	29.172	88.505	1.00	89.00	A	C
ATOM	3933	CG	LYS	676	32.753	28.419	88.334	1.00	88.52	A	C
ATOM	3934	CD	LYS	676	32.341	27.689	89.606	1.00	88.34	A	C
ATOM	3935	CE	LYS	676	30.987	27.002	89.445	1.00	87.77	A	C
ATOM	3936	NZ	LYS	676	30.521	26.358	90.706	1.00	86.22	A	N
ATOM	3937	C	LYS	676	34.771	28.967	86.100	1.00	89.12	A	C
ATOM	3938	O	LYS	676	34.440	27.787	86.200	1.00	89.44	A	O
ATOM	3939	N	ASP	677	35.350	29.458	85.007	1.00	89.74	A	N
ATOM	3940	CA	ASP	677	35.582	28.610	83.839	1.00	90.49	A	C
ATOM	3941	CB	ASP	677	35.982	29.445	82.604	1.00	91.31	A	C
ATOM	3942	CG	ASP	677	37.168	30.363	82.857	1.00	92.06	A	C
ATOM	3943	OD1	ASP	677	36.947	31.523	83.269	1.00	92.05	A	O
ATOM	3944	OD2	ASP	677	38.317	29.934	82.607	1.00	92.38	A	O
ATOM	3945	C	ASP	677	36.542	27.438	84.085	1.00	90.32	A	C
ATOM	3946	O	ASP	677	36.455	26.770	85.117	1.00	90.36	A	O
ATOM	3947	N	ALA	678	37.440	27.181	83.136	1.00	90.07	A	N
ATOM	3948	CA	ALA	678	38.392	26.075	83.236	1.00	89.95	A	C
ATOM	3949	CB	ALA	678	39.218	26.173	84.527	1.00	89.67	A	C
ATOM	3950	C	ALA	678	37.650	24.736	83.153	1.00	89.82	A	C
ATOM	3951	O	ALA	678	37.551	24.152	82.075	1.00	89.72	A	O
ATOM	3952	N	LYS	679	37.101	24.273	84.276	1.00	89.54	A	N
ATOM	3953	CA	LYS	679	36.362	23.009	84.307	1.00	88.99	A	C
ATOM	3954	CB	LYS	679	36.221	22.499	85.750	1.00	89.15	A	C
ATOM	3955	CG	LYS	679	36.318	20.978	85.909	1.00	88.91	A	C
ATOM	3956	CD	LYS	679	35.197	20.240	85.188	1.00	89.06	A	C
ATOM	3957	CE	LYS	679	35.390	18.731	85.243	1.00	88.94	A	C
ATOM	3958	NZ	LYS	679	34.337	17.999	84.481	1.00	88.10	A	N
ATOM	3959	C	LYS	679	34.976	23.191	83.684	1.00	88.36	A	C
ATOM	3960	O	LYS	679	34.418	22.252	83.115	1.00	88.10	A	O
ATOM	3961	N	THR	680	34.437	24.405	83.787	1.00	87.52	A	N
ATOM	3962	CA	THR	680	33.120	24.718	83.241	1.00	86.76	A	C
ATOM	3963	CB	THR	680	32.413	25.821	84.059	1.00	86.77	A	C
ATOM	3964	OG1	THR	680	32.292	25.393	85.420	1.00	87.91	A	O
ATOM	3965	CG2	THR	680	31.017	26.089	83.513	1.00	86.36	A	C
ATOM	3966	C	THR	680	33.153	25.112	81.766	1.00	86.42	A	C
ATOM	3967	O	THR	680	32.188	24.861	81.038	1.00	86.70	A	O
ATOM	3968	N	LYS	681	34.244	25.736	81.323	1.00	85.46	A	N
ATOM	3969	CA	LYS	681	34.358	26.127	79.919	1.00	84.34	A	C
ATOM	3970	CB	LYS	681	35.416	27.222	79.717	1.00	84.47	A	C
ATOM	3971	CG	LYS	681	36.856	26.794	79.990	1.00	84.57	A	C
ATOM	3972	CD	LYS	681	37.829	27.406	78.986	1.00	83.61	A	C
ATOM	3973	CE	LYS	681	37.806	28.922	79.019	1.00	83.45	A	C
ATOM	3974	NZ	LYS	681	38.639	29.504	77.933	1.00	82.66	A	N
ATOM	3975	C	LYS	681	34.658	24.917	79.024	1.00	83.69	A	C
ATOM	3976	O	LYS	681	34.506	24.990	77.806	1.00	83.27	A	O
ATOM	3977	N	LYS	682	35.097	23.814	79.631	1.00	82.89	A	N
ATOM	3978	CA	LYS	682	35.387	22.590	78.884	1.00	82.75	A	C
ATOM	3979	CB	LYS	682	36.311	21.663	79.679	1.00	82.63	A	C
ATOM	3980	CG	LYS	682	37.720	22.202	79.848	1.00	82.81	A	C
ATOM	3981	CD	LYS	682	38.387	22.440	78.500	1.00	82.49	A	C
ATOM	3982	CE	LYS	682	39.688	23.206	78.645	1.00	81.53	A	C
ATOM	3983	NZ	LYS	682	40.650	22.495	79.523	1.00	80.34	A	N
ATOM	3984	C	LYS	682	34.087	21.871	78.552	1.00	82.70	A	C
ATOM	3985	O	LYS	682	34.075	20.897	77.800	1.00	82.66	A	O
ATOM	3986	N	VAL	683	33.000	22.349	79.152	1.00	82.72	A	N
ATOM	3987	CA	VAL	683	31.670	21.799	78.933	1.00	82.53	A	C
ATOM	3988	CB	VAL	683	30.882	21.656	80.267	1.00	82.28	A	C
ATOM	3989	CG1	VAL	683	29.418	21.341	79.993	1.00	81.73	A	C

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ATOM	3990	CG2	VAL	683	31.501	20.557	81.130	1.00	81.51	A	C
ATOM	3991	C	VAL	683	30.927	22.722	77.967	1.00	82.45	A	C
ATOM	3992	O	VAL	683	30.342	22.259	76.990	1.00	83.17	A	O
ATOM	3993	N	VAL	684	30.994	24.028	78.218	1.00	81.87	A	N
ATOM	3994	CA	VAL	684	30.335	25.018	77.362	1.00	81.54	A	C
ATOM	3995	CB	VAL	684	30.412	26.436	77.981	1.00	81.27	A	C
ATOM	3996	CG1	VAL	684	29.596	27.425	77.162	1.00	80.62	A	C
ATOM	3997	CG2	VAL	684	29.912	26.405	79.413	1.00	80.91	A	C
ATOM	3998	C	VAL	684	30.960	25.024	75.962	1.00	81.22	A	C
ATOM	3999	O	VAL	684	30.410	25.602	75.026	1.00	80.84	A	O
ATOM	4000	N	GLU	685	32.112	24.372	75.833	1.00	81.33	A	N
ATOM	4001	CA	GLU	685	32.818	24.269	74.563	1.00	81.45	A	C
ATOM	4002	CB	GLU	685	34.322	24.489	74.782	1.00	81.96	A	C
ATOM	4003	CG	GLU	685	35.189	24.369	73.540	1.00	83.21	A	C
ATOM	4004	CD	GLU	685	35.844	23.005	73.424	1.00	84.50	A	C
ATOM	4005	OE1	GLU	685	35.192	22.058	72.930	1.00	84.58	A	O
ATOM	4006	OE2	GLU	685	37.016	22.879	73.840	1.00	85.27	A	O
ATOM	4007	C	GLU	685	32.530	22.903	73.919	1.00	80.94	A	C
ATOM	4008	O	GLU	685	32.529	22.772	72.692	1.00	81.28	A	O
ATOM	4009	N	SER	686	32.290	21.889	74.748	1.00	80.10	A	N
ATOM	4010	CA	SER	686	31.985	20.550	74.254	1.00	78.87	A	C
ATOM	4011	CB	SER	686	32.248	19.497	75.331	1.00	78.47	A	C
ATOM	4012	OG	SER	686	31.336	19.631	76.407	1.00	78.02	A	O
ATOM	4013	C	SER	686	30.519	20.501	73.830	1.00	78.41	A	C
ATOM	4014	O	SER	686	30.173	19.857	72.839	1.00	78.66	A	O
ATOM	4015	N	LYS	687	29.663	21.188	74.585	1.00	77.05	A	N
ATOM	4016	CA	LYS	687	28.236	21.237	74.281	1.00	76.04	A	C
ATOM	4017	CB	LYS	687	27.452	21.883	75.427	1.00	75.06	A	C
ATOM	4018	CG	LYS	687	27.393	21.039	76.689	1.00	73.89	A	C
ATOM	4019	CD	LYS	687	26.926	19.633	76.373	1.00	72.30	A	C
ATOM	4020	CE	LYS	687	27.049	18.731	77.572	1.00	71.42	A	C
ATOM	4021	NZ	LYS	687	26.928	17.309	77.170	1.00	70.57	A	N
ATOM	4022	C	LYS	687	27.970	21.984	72.978	1.00	75.85	A	C
ATOM	4023	O	LYS	687	26.916	21.818	72.365	1.00	76.35	A	O
ATOM	4024	N	LYS	688	28.918	22.827	72.578	1.00	75.47	A	N
ATOM	4025	CA	LYS	688	28.804	23.582	71.335	1.00	74.75	A	C
ATOM	4026	CB	LYS	688	29.780	24.765	71.329	1.00	75.43	A	C
ATOM	4027	CG	LYS	688	29.715	25.636	70.078	1.00	76.04	A	C
ATOM	4028	CD	LYS	688	30.800	26.705	70.082	1.00	76.23	A	C
ATOM	4029	CE	LYS	688	30.779	27.520	68.794	1.00	76.06	A	C
ATOM	4030	NZ	LYS	688	31.814	28.593	68.777	1.00	75.66	A	N
ATOM	4031	C	LYS	688	29.123	22.625	70.187	1.00	73.47	A	C
ATOM	4032	O	LYS	688	28.521	22.710	69.117	1.00	73.50	A	O
ATOM	4033	N	LYS	689	30.065	21.712	70.426	1.00	71.89	A	N
ATOM	4034	CA	LYS	689	30.459	20.723	69.423	1.00	70.93	A	C
ATOM	4035	CB	LYS	689	31.816	20.093	69.758	1.00	71.06	A	C
ATOM	4036	CG	LYS	689	32.983	21.057	69.652	1.00	71.51	A	C
ATOM	4037	CD	LYS	689	34.099	20.517	68.769	1.00	71.56	A	C
ATOM	4038	CE	LYS	689	34.811	19.331	69.398	1.00	71.43	A	C
ATOM	4039	NZ	LYS	689	36.023	18.957	68.613	1.00	71.36	A	N
ATOM	4040	C	LYS	689	29.403	19.634	69.281	1.00	70.12	A	C
ATOM	4041	O	LYS	689	29.459	18.825	68.357	1.00	70.38	A	O
ATOM	4042	N	ALA	690	28.466	19.596	70.224	1.00	68.86	A	N
ATOM	4043	CA	ALA	690	27.375	18.629	70.191	1.00	67.35	A	C
ATOM	4044	CB	ALA	690	26.738	18.503	71.570	1.00	67.16	A	C
ATOM	4045	C	ALA	690	26.346	19.122	69.170	1.00	66.71	A	C
ATOM	4046	O	ALA	690	25.740	18.326	68.457	1.00	66.76	A	O
ATOM	4047	N	VAL	691	26.181	20.445	69.096	1.00	66.21	A	N
ATOM	4048	CA	VAL	691	25.251	21.094	68.168	1.00	65.04	A	C
ATOM	4049	CB	VAL	691	25.031	22.581	68.530	1.00	64.50	A	C
ATOM	4050	CG1	VAL	691	24.033	23.212	67.592	1.00	64.09	A	C
ATOM	4051	CG2	VAL	691	24.533	22.708	69.957	1.00	65.37	A	C
ATOM	4052	C	VAL	691	25.782	21.010	66.743	1.00	65.20	A	C

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ATOM	4053	O	VAL	691	25.022	21.112	65.785	1.00	64.62	A	O
ATOM	4054	N	GLN	692	27.095	20.847	66.613	1.00	66.10	A	N
ATOM	4055	CA	GLN	692	27.729	20.723	65.307	1.00	67.13	A	C
ATOM	4056	CB	GLN	692	29.241	20.920	65.411	1.00	67.32	A	C
ATOM	4057	CG	GLN	692	29.663	22.350	65.693	1.00	68.12	A	C
ATOM	4058	CD	GLN	692	31.170	22.519	65.699	1.00	68.31	A	C
ATOM	4059	OE1	GLN	692	31.869	22.057	64.793	1.00	68.36	A	O
ATOM	4060	NE2	GLN	692	31.680	23.184	66.726	1.00	69.09	A	N
ATOM	4061	C	GLN	692	27.426	19.357	64.705	1.00	67.62	A	C
ATOM	4062	O	GLN	692	26.813	19.269	63.640	1.00	68.65	A	O
ATOM	4063	N	ARG	693	27.841	18.294	65.392	1.00	68.09	A	N
ATOM	4064	CA	ARG	693	27.598	16.931	64.918	1.00	68.45	A	C
ATOM	4065	CB	ARG	693	28.115	15.898	65.927	1.00	69.89	A	C
ATOM	4066	CG	ARG	693	29.627	15.650	65.891	1.00	71.12	A	C
ATOM	4067	CD	ARG	693	30.088	14.769	67.070	1.00	72.39	A	C
ATOM	4068	NE	ARG	693	30.168	15.516	68.332	1.00	73.64	A	N
ATOM	4069	CZ	ARG	693	29.626	15.137	69.492	1.00	73.02	A	C
ATOM	4070	NH1	ARG	693	28.945	13.999	69.588	1.00	72.00	A	N
ATOM	4071	NH2	ARG	693	29.745	15.919	70.558	1.00	72.79	A	N
ATOM	4072	C	ARG	693	26.118	16.691	64.639	1.00	67.56	A	C
ATOM	4073	O	ARG	693	25.778	15.947	63.725	1.00	66.92	A	O
ATOM	4074	N	LEU	694	25.248	17.338	65.415	1.00	67.09	A	N
ATOM	4075	CA	LEU	694	23.801	17.200	65.237	1.00	67.53	A	C
ATOM	4076	CB	LEU	694	23.032	17.626	66.491	1.00	67.57	A	C
ATOM	4077	CG	LEU	694	22.948	16.656	67.670	1.00	66.94	A	C
ATOM	4078	CD1	LEU	694	22.120	17.291	68.751	1.00	66.90	A	C
ATOM	4079	CD2	LEU	694	22.319	15.345	67.250	1.00	67.25	A	C
ATOM	4080	C	LEU	694	23.274	17.977	64.038	1.00	67.55	A	C
ATOM	4081	O	LEU	694	22.467	17.448	63.273	1.00	68.45	A	O
ATOM	4082	N	GLU	695	23.688	19.237	63.899	1.00	67.37	A	N
ATOM	4083	CA	GLU	695	23.253	20.063	62.769	1.00	66.92	A	C
ATOM	4084	CB	GLU	695	23.658	21.529	62.958	1.00	67.81	A	C
ATOM	4085	CG	GLU	695	22.677	22.309	63.840	1.00	69.62	A	C
ATOM	4086	CD	GLU	695	23.088	23.754	64.114	1.00	70.50	A	C
ATOM	4087	OE1	GLU	695	22.392	24.423	64.913	1.00	69.60	A	O
ATOM	4088	OE2	GLU	695	24.098	24.222	63.540	1.00	71.50	A	O
ATOM	4089	C	GLU	695	23.790	19.509	61.451	1.00	65.96	A	C
ATOM	4090	O	GLU	695	23.190	19.715	60.398	1.00	65.85	A	O
ATOM	4091	N	GLU	696	24.916	18.801	61.521	1.00	64.77	A	N
ATOM	4092	CA	GLU	696	25.511	18.174	60.344	1.00	63.46	A	C
ATOM	4093	CB	GLU	696	26.871	17.574	60.676	1.00	63.10	A	C
ATOM	4094	CG	GLU	696	27.981	18.545	60.926	1.00	63.67	A	C
ATOM	4095	CD	GLU	696	29.284	17.820	61.188	1.00	65.51	A	C
ATOM	4096	OE1	GLU	696	29.683	17.000	60.332	1.00	66.21	A	O
ATOM	4097	OE2	GLU	696	29.899	18.043	62.255	1.00	65.92	A	O
ATOM	4098	C	GLU	696	24.598	17.028	59.921	1.00	62.57	A	C
ATOM	4099	O	GLU	696	24.200	16.927	58.763	1.00	62.30	A	O
ATOM	4100	N	GLN	697	24.298	16.156	60.880	1.00	61.25	A	N
ATOM	4101	CA	GLN	697	23.442	15.001	60.658	1.00	60.10	A	C
ATOM	4102	CB	GLN	697	23.355	14.165	61.929	1.00	60.30	A	C
ATOM	4103	CG	GLN	697	24.657	13.512	62.333	1.00	58.88	A	C
ATOM	4104	CD	GLN	697	24.503	12.669	63.576	1.00	57.59	A	C
ATOM	4105	OE1	GLN	697	24.575	13.174	64.695	1.00	57.00	A	O
ATOM	4106	NE2	GLN	697	24.279	11.375	63.386	1.00	57.15	A	N
ATOM	4107	C	GLN	697	22.038	15.375	60.199	1.00	59.51	A	C
ATOM	4108	O	GLN	697	21.401	14.611	59.476	1.00	58.47	A	O
ATOM	4109	N	LEU	698	21.541	16.522	60.657	1.00	59.44	A	N
ATOM	4110	CA	LEU	698	20.216	16.972	60.255	1.00	60.09	A	C
ATOM	4111	CB	LEU	698	19.707	18.108	61.153	1.00	60.12	A	C
ATOM	4112	CG	LEU	698	18.286	18.618	60.848	1.00	60.79	A	C
ATOM	4113	CD1	LEU	698	17.279	17.485	60.940	1.00	60.57	A	C
ATOM	4114	CD2	LEU	698	17.893	19.740	61.794	1.00	60.54	A	C
ATOM	4115	C	LEU	698	20.318	17.442	58.814	1.00	60.63	A	C

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ATOM	4116	O	LEU	698	19.390	17.259	58.031	1.00	61.11	A	O
ATOM	4117	N	MET	699	21.468	18.014	58.469	1.00	61.38	A	N
ATOM	4118	CA	MET	699	21.736	18.505	57.119	1.00	62.39	A	C
ATOM	4119	CB	MET	699	23.104	19.182	57.089	1.00	64.08	A	C
ATOM	4120	CG	MET	699	23.466	19.803	55.768	1.00	66.05	A	C
ATOM	4121	SD	MET	699	22.718	21.412	55.624	1.00	69.95	A	S
ATOM	4122	CE	MET	699	24.171	22.435	55.402	1.00	69.65	A	C
ATOM	4123	C	MET	699	21.740	17.327	56.149	1.00	62.11	A	C
ATOM	4124	O	MET	699	21.050	17.331	55.133	1.00	61.49	A	O
ATOM	4125	N	LYS	700	22.520	16.312	56.496	1.00	62.25	A	N
ATOM	4126	CA	LYS	700	22.653	15.099	55.704	1.00	62.70	A	C
ATOM	4127	CB	LYS	700	23.829	14.284	56.247	1.00	62.09	A	C
ATOM	4128	CG	LYS	700	24.397	13.253	55.305	1.00	62.05	A	C
ATOM	4129	CD	LYS	700	25.682	12.667	55.880	1.00	61.85	A	C
ATOM	4130	CE	LYS	700	26.295	11.640	54.941	1.00	61.73	A	C
ATOM	4131	NZ	LYS	700	27.581	11.117	55.464	1.00	62.03	A	N
ATOM	4132	C	LYS	700	21.359	14.268	55.734	1.00	63.25	A	C
ATOM	4133	O	LYS	700	21.351	13.106	55.315	1.00	63.46	A	O
ATOM	4134	N	LEU	701	20.288	14.860	56.269	1.00	63.55	A	N
ATOM	4135	CA	LEU	701	18.965	14.228	56.355	1.00	64.26	A	C
ATOM	4136	CB	LEU	701	18.527	14.019	57.812	1.00	64.58	A	C
ATOM	4137	CG	LEU	701	19.039	12.786	58.570	1.00	64.87	A	C
ATOM	4138	CD1	LEU	701	18.558	12.844	60.009	1.00	65.54	A	C
ATOM	4139	CD2	LEU	701	18.566	11.494	57.903	1.00	64.45	A	C
ATOM	4140	C	LEU	701	17.936	15.084	55.610	1.00	64.41	A	C
ATOM	4141	O	LEU	701	16.928	14.574	55.115	1.00	64.10	A	O
ATOM	4142	N	GLU	702	18.173	16.394	55.585	1.00	64.80	A	N
ATOM	4143	CA	GLU	702	17.314	17.326	54.857	1.00	64.41	A	C
ATOM	4144	CB	GLU	702	17.646	18.776	55.222	1.00	65.85	A	C
ATOM	4145	CG	GLU	702	17.611	19.131	56.693	1.00	66.56	A	C
ATOM	4146	CD	GLU	702	18.143	20.537	56.944	1.00	67.41	A	C
ATOM	4147	OE1	GLU	702	19.381	20.716	57.032	1.00	67.55	A	O
ATOM	4148	OE2	GLU	702	17.319	21.469	57.037	1.00	67.48	A	O
ATOM	4149	C	GLU	702	17.721	17.110	53.397	1.00	63.51	A	C
ATOM	4150	O	GLU	702	16.888	17.133	52.491	1.00	63.71	A	O
ATOM	4151	N	VAL	703	19.033	16.948	53.204	1.00	61.61	A	N
ATOM	4152	CA	VAL	703	19.656	16.710	51.909	1.00	59.51	A	C
ATOM	4153	CB	VAL	703	21.075	17.313	51.877	1.00	59.90	A	C
ATOM	4154	CG1	VAL	703	21.842	16.861	50.635	1.00	59.84	A	C
ATOM	4155	CG2	VAL	703	20.980	18.839	51.925	1.00	59.56	A	C
ATOM	4156	C	VAL	703	19.709	15.203	51.715	1.00	58.86	A	C
ATOM	4157	O	VAL	703	20.765	14.573	51.788	1.00	58.76	A	O
ATOM	4158	N	GLN	704	18.519	14.644	51.545	1.00	57.74	A	N
ATOM	4159	CA	GLN	704	18.278	13.223	51.345	1.00	57.11	A	C
ATOM	4160	CB	GLN	704	18.662	12.414	52.589	1.00	58.74	A	C
ATOM	4161	CG	GLN	704	18.614	10.893	52.390	1.00	61.17	A	C
ATOM	4162	CD	GLN	704	18.777	10.093	53.687	1.00	62.00	A	C
ATOM	4163	OE1	GLN	704	19.139	10.633	54.736	1.00	62.04	A	O
ATOM	4164	NE2	GLN	704	18.506	8.794	53.611	1.00	62.67	A	N
ATOM	4165	C	GLN	704	16.772	13.154	51.131	1.00	56.34	A	C
ATOM	4166	O	GLN	704	16.258	12.215	50.536	1.00	57.10	A	O
ATOM	4167	N	ALA	705	16.069	14.146	51.669	1.00	55.88	A	N
ATOM	4168	CA	ALA	705	14.619	14.260	51.527	1.00	54.93	A	C
ATOM	4169	CB	ALA	705	14.016	14.854	52.786	1.00	54.76	A	C
ATOM	4170	C	ALA	705	14.336	15.162	50.325	1.00	54.52	A	C
ATOM	4171	O	ALA	705	13.234	15.168	49.785	1.00	53.37	A	O
ATOM	4172	N	THR	706	15.347	15.941	49.941	1.00	55.21	A	N
ATOM	4173	CA	THR	706	15.281	16.853	48.804	1.00	56.15	A	C
ATOM	4174	CB	THR	706	16.206	18.073	49.011	1.00	56.25	A	C
ATOM	4175	OG1	THR	706	15.689	18.892	50.068	1.00	56.32	A	O
ATOM	4176	CG2	THR	706	16.307	18.902	47.734	1.00	56.65	A	C
ATOM	4177	C	THR	706	15.721	16.104	47.554	1.00	56.91	A	C
ATOM	4178	O	THR	706	15.028	16.127	46.538	1.00	56.72	A	O



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ATOM	4179	N	ASP	707	16.878	15.447	47.645	1.00	57.94	A	N
ATOM	4180	CA	ASP	707	17.436	14.660	46.545	1.00	58.92	A	C
ATOM	4181	CB	ASP	707	18.760	13.998	46.955	1.00	60.38	A	C
ATOM	4182	CG	ASP	707	19.842	14.996	47.302	1.00	62.24	A	C
ATOM	4183	OD1	ASP	707	19.918	16.049	46.627	1.00	63.45	A	O
ATOM	4184	OD2	ASP	707	20.626	14.716	48.243	1.00	62.79	A	O
ATOM	4185	C	ASP	707	16.474	13.554	46.125	1.00	59.11	A	C
ATOM	4186	O	ASP	707	16.201	13.380	44.939	1.00	60.13	A	O
ATOM	4187	N	ARG	708	15.976	12.804	47.107	1.00	58.70	A	N
ATOM	4188	CA	ARG	708	15.060	11.692	46.864	1.00	58.69	A	C
ATOM	4189	CB	ARG	708	14.736	10.963	48.178	1.00	59.29	A	C
ATOM	4190	CG	ARG	708	15.422	9.588	48.356	1.00	60.17	A	C
ATOM	4191	CD	ARG	708	16.919	9.659	48.732	1.00	60.88	A	C
ATOM	4192	NE	ARG	708	17.727	10.488	47.830	1.00	61.16	A	N
ATOM	4193	CZ	ARG	708	18.112	10.139	46.603	1.00	61.73	A	C
ATOM	4194	NH1	ARG	708	18.840	10.980	45.876	1.00	61.02	A	N
ATOM	4195	NH2	ARG	708	17.770	8.959	46.096	1.00	62.51	A	N
ATOM	4196	C	ARG	708	13.776	12.071	46.126	1.00	58.51	A	C
ATOM	4197	O	ARG	708	13.173	11.233	45.463	1.00	59.15	A	O
ATOM	4198	N	GLU	709	13.361	13.327	46.241	1.00	58.57	A	N
ATOM	4199	CA	GLU	709	12.155	13.804	45.566	1.00	58.57	A	C
ATOM	4200	CB	GLU	709	11.514	14.950	46.358	1.00	59.89	A	C
ATOM	4201	CG	GLU	709	11.090	14.595	47.782	1.00	60.75	A	C
ATOM	4202	CD	GLU	709	9.782	13.824	47.859	1.00	61.92	A	C
ATOM	4203	OE1	GLU	709	9.277	13.645	48.991	1.00	61.15	A	O
ATOM	4204	OE2	GLU	709	9.256	13.401	46.801	1.00	62.46	A	O
ATOM	4205	C	GLU	709	12.480	14.290	44.154	1.00	57.95	A	C
ATOM	4206	O	GLU	709	11.596	14.381	43.304	1.00	58.31	A	O
ATOM	4207	N	GLU	710	13.744	14.633	43.924	1.00	57.19	A	N
ATOM	4208	CA	GLU	710	14.195	15.119	42.623	1.00	56.39	A	C
ATOM	4209	CB	GLU	710	15.403	16.054	42.780	1.00	57.92	A	C
ATOM	4210	CG	GLU	710	15.108	17.404	43.447	1.00	60.19	A	C
ATOM	4211	CD	GLU	710	16.375	18.208	43.757	1.00	61.61	A	C
ATOM	4212	OE1	GLU	710	16.258	19.420	44.059	1.00	61.65	A	O
ATOM	4213	OE2	GLU	710	17.488	17.628	43.713	1.00	62.13	A	O
ATOM	4214	C	GLU	710	14.562	13.968	41.693	1.00	54.68	A	C
ATOM	4215	O	GLU	710	14.003	13.847	40.601	1.00	55.10	A	O
ATOM	4216	N	ASN	711	15.496	13.126	42.138	1.00	51.58	A	N
ATOM	4217	CA	ASN	711	15.967	11.979	41.364	1.00	48.72	A	C
ATOM	4218	CB	ASN	711	17.270	11.449	41.978	1.00	50.17	A	C
ATOM	4219	CG	ASN	711	18.235	10.902	40.933	1.00	51.79	A	C
ATOM	4220	OD1	ASN	711	18.893	11.665	40.222	1.00	53.16	A	O
ATOM	4221	ND2	ASN	711	18.326	9.575	40.839	1.00	50.58	A	N
ATOM	4222	C	ASN	711	14.928	10.851	41.294	1.00	45.80	A	C
ATOM	4223	O	ASN	711	15.238	9.743	40.868	1.00	45.58	A	O
ATOM	4224	N	LYS	712	13.690	11.164	41.667	1.00	43.43	A	N
ATOM	4225	CA	LYS	712	12.577	10.210	41.696	1.00	41.42	A	C
ATOM	4226	CB	LYS	712	11.314	10.916	42.187	1.00	40.93	A	C
ATOM	4227	CG	LYS	712	10.137	10.016	42.465	1.00	40.06	A	C
ATOM	4228	CD	LYS	712	8.920	10.853	42.807	1.00	40.29	A	C
ATOM	4229	CE	LYS	712	7.730	9.991	43.161	1.00	42.14	A	C
ATOM	4230	NZ	LYS	712	8.016	9.129	44.347	1.00	44.30	A	N
ATOM	4231	C	LYS	712	12.285	9.483	40.382	1.00	40.46	A	C
ATOM	4232	O	LYS	712	12.063	8.274	40.380	1.00	40.77	A	O
ATOM	4233	N	GLN	713	12.237	10.224	39.277	1.00	39.43	A	N
ATOM	4234	CA	GLN	713	11.981	9.628	37.965	1.00	37.30	A	C
ATOM	4235	CB	GLN	713	10.912	10.425	37.217	1.00	38.61	A	C
ATOM	4236	CG	GLN	713	9.570	10.507	37.910	1.00	40.93	A	C
ATOM	4237	CD	GLN	713	8.641	11.512	37.237	1.00	44.42	A	C
ATOM	4238	OE1	GLN	713	8.254	11.348	36.068	1.00	45.06	A	O
ATOM	4239	NE2	GLN	713	8.295	12.576	37.967	1.00	44.85	A	N
ATOM	4240	C	GLN	713	13.251	9.574	37.105	1.00	35.10	A	C
ATOM	4241	O	GLN	713	13.181	9.280	35.920	1.00	35.09	A	O

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ATOM	4242	N	ILE	714	14.408	9.836	37.708	1.00	32.60	A	N
ATOM	4243	CA	ILE	714	15.678	9.844	36.981	1.00	29.04	A	C
ATOM	4244	CB	ILE	714	16.494	11.095	37.350	1.00	27.91	A	C
ATOM	4245	CG2	ILE	714	17.782	11.143	36.558	1.00	28.01	A	C
ATOM	4246	CG1	ILE	714	15.649	12.346	37.115	1.00	26.14	A	C
ATOM	4247	CD1	ILE	714	15.049	12.415	35.725	1.00	26.23	A	C
ATOM	4248	C	ILE	714	16.534	8.596	37.201	1.00	28.08	A	C
ATOM	4249	O	ILE	714	16.703	8.136	38.334	1.00	28.69	A	O
ATOM	4250	N	ALA	715	17.085	8.065	36.112	1.00	26.01	A	N
ATOM	4251	CA	ALA	715	17.922	6.872	36.171	1.00	24.83	A	C
ATOM	4252	CB	ALA	715	17.431	5.837	35.184	1.00	23.58	A	C
ATOM	4253	C	ALA	715	19.350	7.243	35.856	1.00	24.33	A	C
ATOM	4254	O	ALA	715	19.665	7.591	34.715	1.00	26.95	A	O
ATOM	4255	N	LEU	716	20.213	7.185	36.864	1.00	22.48	A	N
ATOM	4256	CA	LEU	716	21.627	7.526	36.688	1.00	21.07	A	C
ATOM	4257	CB	LEU	716	22.236	7.892	38.035	1.00	19.62	A	C
ATOM	4258	CG	LEU	716	21.506	9.048	38.689	1.00	18.49	A	C
ATOM	4259	CD1	LEU	716	22.206	9.480	39.950	1.00	18.81	A	C
ATOM	4260	CD2	LEU	716	21.472	10.177	37.702	1.00	19.77	A	C
ATOM	4261	C	LEU	716	22.449	6.399	36.067	1.00	20.52	A	C
ATOM	4262	O	LEU	716	23.546	6.632	35.558	1.00	21.06	A	O
ATOM	4263	N	GLY	717	21.887	5.192	36.099	1.00	18.69	A	N
ATOM	4264	CA	GLY	717	22.553	4.008	35.595	1.00	16.32	A	C
ATOM	4265	C	GLY	717	23.174	3.987	34.214	1.00	15.32	A	C
ATOM	4266	O	GLY	717	24.403	3.998	34.089	1.00	14.95	A	O
ATOM	4267	N	THR	718	22.340	3.944	33.177	1.00	13.63	A	N
ATOM	4268	CA	THR	718	22.852	3.855	31.822	1.00	12.22	A	C
ATOM	4269	CB	THR	718	21.740	3.635	30.768	1.00	11.38	A	C
ATOM	4270	OG1	THR	718	22.122	4.238	29.534	1.00	10.98	A	O
ATOM	4271	CG2	THR	718	20.402	4.162	31.224	1.00	11.73	A	C
ATOM	4272	C	THR	718	23.896	4.866	31.369	1.00	13.08	A	C
ATOM	4273	O	THR	718	24.866	4.473	30.736	1.00	14.49	A	O
ATOM	4274	N	SER	719	23.744	6.143	31.704	1.00	13.37	A	N
ATOM	4275	CA	SER	719	24.756	7.137	31.304	1.00	13.40	A	C
ATOM	4276	CB	SER	719	24.236	8.576	31.480	1.00	13.50	A	C
ATOM	4277	OG	SER	719	23.925	8.873	32.827	1.00	14.69	A	O
ATOM	4278	C	SER	719	26.084	6.961	32.054	1.00	13.17	A	C
ATOM	4279	O	SER	719	27.148	7.112	31.479	1.00	12.71	A	O
ATOM	4280	N	LYS	720	26.007	6.633	33.339	1.00	14.67	A	N
ATOM	4281	CA	LYS	720	27.181	6.423	34.169	1.00	15.98	A	C
ATOM	4282	CB	LYS	720	26.746	6.206	35.617	1.00	15.85	A	C
ATOM	4283	CG	LYS	720	27.858	5.920	36.625	1.00	16.56	A	C
ATOM	4284	CD	LYS	720	27.272	5.841	38.030	1.00	17.89	A	C
ATOM	4285	CE	LYS	720	27.972	4.818	38.902	1.00	18.99	A	C
ATOM	4286	NZ	LYS	720	29.336	5.239	39.283	1.00	20.77	A	N
ATOM	4287	C	LYS	720	28.002	5.236	33.677	1.00	18.31	A	C
ATOM	4288	O	LYS	720	29.161	5.079	34.058	1.00	20.50	A	O
ATOM	4289	N	LEU	721	27.428	4.432	32.785	1.00	19.46	A	N
ATOM	4290	CA	LEU	721	28.134	3.268	32.259	1.00	18.80	A	C
ATOM	4291	CB	LEU	721	27.523	1.987	32.821	1.00	19.98	A	C
ATOM	4292	CG	LEU	721	27.820	1.592	34.273	1.00	19.94	A	C
ATOM	4293	CD1	LEU	721	26.751	0.641	34.764	1.00	19.25	A	C
ATOM	4294	CD2	LEU	721	29.186	0.933	34.368	1.00	20.98	A	C
ATOM	4295	C	LEU	721	28.255	3.147	30.737	1.00	17.90	A	C
ATOM	4296	O	LEU	721	29.125	2.422	30.267	1.00	19.38	A	O
ATOM	4297	N	ASN	722	27.407	3.847	29.977	1.00	16.00	A	N
ATOM	4298	CA	ASN	722	27.413	3.786	28.503	1.00	14.53	A	C
ATOM	4299	CB	ASN	722	26.057	3.309	27.997	1.00	13.33	A	C
ATOM	4300	CG	ASN	722	25.727	1.907	28.464	1.00	14.21	A	C
ATOM	4301	OD1	ASN	722	26.267	0.928	27.944	1.00	13.67	A	O
ATOM	4302	ND2	ASN	722	24.847	1.799	29.459	1.00	13.07	A	N
ATOM	4303	C	ASN	722	27.828	5.071	27.777	1.00	14.63	A	C
ATOM	4304	O	ASN	722	28.457	5.021	26.725	1.00	16.32	A	O

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ATOM	4305	N	PTR	723	27.377	6.214	28.276	1.00	14.71	A	N
ATOM	4306	CA	PTR	723	27.753	7.524	27.739	1.00	12.88	A	C
ATOM	4307	CB	PTR	723	26.526	8.445	27.811	1.00	11.46	A	C
ATOM	4308	CG	PTR	723	25.396	7.886	26.975	1.00	10.65	A	C
ATOM	4309	CD1	PTR	723	24.332	7.206	27.556	1.00	12.16	A	C
ATOM	4310	CE1	PTR	723	23.375	6.520	26.773	1.00	9.74	A	C
ATOM	4311	CD2	PTR	723	25.474	7.889	25.593	1.00	11.83	A	C
ATOM	4312	CE2	PTR	723	24.533	7.208	24.808	1.00	10.31	A	C
ATOM	4313	CZ	PTR	723	23.495	6.519	25.402	1.00	9.36	A	C
ATOM	4314	OH	PTR	723	22.691	5.772	24.561	1.00	10.24	A	O
ATOM	4315	C	PTR	723	28.871	7.918	28.722	1.00	12.54	A	C
ATOM	4316	O	PTR	723	29.527	7.030	29.258	1.00	15.70	A	O
ATOM	4317	P	PTR	723	21.234	5.149	24.798	1.00	14.47	A	P
ATOM	4318	O1P	PTR	723	20.420	5.911	25.790	1.00	13.27	A	O
ATOM	4319	O2P	PTR	723	20.628	4.817	23.468	1.00	11.06	A	O
ATOM	4320	O3P	PTR	723	21.453	3.721	25.484	1.00	5.45	A	O
ATOM	4321	N	LEU	724	29.179	9.191	28.907	1.00	9.97	A	N
ATOM	4322	CA	LEU	724	30.187	9.565	29.928	1.00	7.75	A	C
ATOM	4323	CB	LEU	724	29.575	9.458	31.341	1.00	3.48	A	C
ATOM	4324	CG	LEU	724	28.237	10.143	31.612	1.00	1.17	A	C
ATOM	4325	CD1	LEU	724	27.895	10.086	33.080	1.00	2.77	A	C
ATOM	4326	CD2	LEU	724	28.306	11.578	31.170	1.00	1.05	A	C
ATOM	4327	C	LEU	724	31.570	8.883	29.973	1.00	6.75	A	C
ATOM	4328	O	LEU	724	31.729	7.802	30.524	1.00	5.85	A	O
ATOM	4329	N	ASP	725	32.580	9.588	29.478	1.00	7.29	A	N
ATOM	4330	CA	ASP	725	33.960	9.122	29.467	1.00	5.46	A	C
ATOM	4331	CB	ASP	725	34.794	10.119	28.664	1.00	4.90	A	C
ATOM	4332	CG	ASP	725	36.220	9.665	28.425	1.00	6.51	A	C
ATOM	4333	OD1	ASP	725	36.793	8.848	29.191	1.00	3.76	A	O
ATOM	4334	OD2	ASP	725	36.784	10.177	27.443	1.00	7.51	A	O
ATOM	4335	C	ASP	725	34.431	9.091	30.914	1.00	4.90	A	C
ATOM	4336	O	ASP	725	34.440	10.113	31.593	1.00	4.63	A	O
ATOM	4337	N	PRO	726	34.849	7.917	31.397	1.00	4.76	A	N
ATOM	4338	CD	PRO	726	34.960	6.668	30.632	1.00	5.72	A	C
ATOM	4339	CA	PRO	726	35.331	7.715	32.768	1.00	5.03	A	C
ATOM	4340	CB	PRO	726	35.583	6.218	32.817	1.00	3.08	A	C
ATOM	4341	CG	PRO	726	36.009	5.935	31.418	1.00	6.05	A	C
ATOM	4342	C	PRO	726	36.581	8.510	33.150	1.00	5.71	A	C
ATOM	4343	O	PRO	726	36.865	8.678	34.328	1.00	7.75	A	O
ATOM	4344	N	ARG	727	37.334	8.985	32.165	1.00	5.59	A	N
ATOM	4345	CA	ARG	727	38.530	9.786	32.434	1.00	5.75	A	C
ATOM	4346	CB	ARG	727	39.348	9.986	31.140	1.00	4.33	A	C
ATOM	4347	CG	ARG	727	40.087	8.734	30.682	1.00	3.64	A	C
ATOM	4348	CD	ARG	727	40.640	8.829	29.272	1.00	3.89	A	C
ATOM	4349	NE	ARG	727	39.618	9.099	28.255	1.00	6.57	A	N
ATOM	4350	CZ	ARG	727	39.851	9.110	26.939	1.00	6.75	A	C
ATOM	4351	NH1	ARG	727	41.059	8.861	26.465	1.00	6.23	A	N
ATOM	4352	NH2	ARG	727	38.891	9.430	26.089	1.00	8.25	A	N
ATOM	4353	C	ARG	727	38.076	11.125	33.051	1.00	6.50	A	C
ATOM	4354	O	ARG	727	38.815	11.773	33.794	1.00	8.32	A	O
ATOM	4355	N	ILE	728	36.824	11.492	32.800	1.00	5.60	A	N
ATOM	4356	CA	ILE	728	36.264	12.711	33.347	1.00	4.68	A	C
ATOM	4357	CB	ILE	728	34.946	13.051	32.666	1.00	1.00	A	C
ATOM	4358	CG2	ILE	728	34.346	14.268	33.293	1.00	1.00	A	C
ATOM	4359	CG1	ILE	728	35.190	13.250	31.175	1.00	1.00	A	C
ATOM	4360	CD1	ILE	728	34.047	13.894	30.411	1.00	2.87	A	C
ATOM	4361	C	ILE	728	36.051	12.541	34.856	1.00	6.46	A	C
ATOM	4362	O	ILE	728	36.302	13.460	35.651	1.00	7.56	A	O
ATOM	4363	N	THR	729	35.628	11.345	35.245	1.00	6.60	A	N
ATOM	4364	CA	THR	729	35.384	11.035	36.644	1.00	6.36	A	C
ATOM	4365	CB	THR	729	34.479	9.831	36.766	1.00	6.67	A	C
ATOM	4366	OG1	THR	729	33.290	10.065	36.001	1.00	8.78	A	O
ATOM	4367	CG2	THR	729	34.128	9.591	38.223	1.00	5.66	A	C

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ATOM	4368	C	THR	729	36.674	10.745	37.406	1.00	6.86	A	C
ATOM	4369	O	THR	729	36.883	11.243	38.509	1.00	7.09	A	O
ATOM	4370	N	VAL	730	37.528	9.919	36.819	1.00	6.75	A	N
ATOM	4371	CA	VAL	730	38.785	9.566	37.441	1.00	5.72	A	C
ATOM	4372	CB	VAL	730	39.519	8.488	36.628	1.00	5.52	A	C
ATOM	4373	CG1	VAL	730	40.906	8.226	37.196	1.00	3.71	A	C
ATOM	4374	CG2	VAL	730	38.697	7.220	36.625	1.00	2.21	A	C
ATOM	4375	C	VAL	730	39.648	10.795	37.632	1.00	6.83	A	C
ATOM	4376	O	VAL	730	40.510	10.808	38.499	1.00	7.71	A	O
ATOM	4377	N	ALA	731	39.420	11.834	36.831	1.00	8.62	A	N
ATOM	4378	CA	ALA	731	40.189	13.084	36.980	1.00	8.92	A	C
ATOM	4379	CB	ALA	731	40.165	13.911	35.689	1.00	5.19	A	C
ATOM	4380	C	ALA	731	39.563	13.866	38.136	1.00	8.32	A	C
ATOM	4381	O	ALA	731	40.245	14.284	39.059	1.00	8.35	A	O
ATOM	4382	N	TRP	732	38.245	14.017	38.091	1.00	9.32	A	N
ATOM	4383	CA	TRP	732	37.514	14.712	39.132	1.00	9.74	A	C
ATOM	4384	CB	TRP	732	36.020	14.496	38.942	1.00	9.70	A	C
ATOM	4385	CG	TRP	732	35.166	15.166	39.942	1.00	8.25	A	C
ATOM	4386	CD2	TRP	732	34.644	14.592	41.150	1.00	9.58	A	C
ATOM	4387	CE2	TRP	732	33.869	15.592	41.782	1.00	9.19	A	C
ATOM	4388	CE3	TRP	732	34.755	13.328	41.761	1.00	9.15	A	C
ATOM	4389	CD1	TRP	732	34.700	16.438	39.887	1.00	7.92	A	C
ATOM	4390	NE1	TRP	732	33.919	16.707	40.986	1.00	9.08	A	N
ATOM	4391	CZ2	TRP	732	33.207	15.375	43.000	1.00	6.98	A	C
ATOM	4392	CZ3	TRP	732	34.092	13.110	42.977	1.00	8.78	A	C
ATOM	4393	CH2	TRP	732	33.329	14.133	43.579	1.00	7.48	A	C
ATOM	4394	C	TRP	732	37.961	14.140	40.462	1.00	11.36	A	C
ATOM	4395	O	TRP	732	38.431	14.877	41.312	1.00	13.26	A	O
ATOM	4396	N	CYS	733	37.891	12.817	40.601	1.00	13.71	A	N
ATOM	4397	CA	CYS	733	38.289	12.132	41.832	1.00	14.89	A	C
ATOM	4398	CB	CYS	733	38.073	10.624	41.704	1.00	17.61	A	C
ATOM	4399	SG	CYS	733	36.331	10.111	41.757	1.00	26.39	A	S
ATOM	4400	C	CYS	733	39.728	12.420	42.228	1.00	13.64	A	C
ATOM	4401	O	CYS	733	39.988	12.728	43.385	1.00	13.02	A	O
ATOM	4402	N	LYS	734	40.659	12.314	41.279	1.00	12.95	A	N
ATOM	4403	CA	LYS	734	42.064	12.598	41.556	1.00	12.93	A	C
ATOM	4404	CB	LYS	734	42.917	12.551	40.289	1.00	12.29	A	C
ATOM	4405	CG	LYS	734	43.144	11.188	39.679	1.00	16.88	A	C
ATOM	4406	CD	LYS	734	44.101	10.310	40.487	1.00	19.39	A	C
ATOM	4407	CE	LYS	734	45.143	9.632	39.581	1.00	21.53	A	C
ATOM	4408	NZ	LYS	734	44.575	8.829	38.448	1.00	20.78	A	N
ATOM	4409	C	LYS	734	42.144	14.007	42.107	1.00	13.50	A	C
ATOM	4410	O	LYS	734	42.788	14.243	43.109	1.00	16.19	A	O
ATOM	4411	N	LYS	735	41.447	14.930	41.457	1.00	14.76	A	N
ATOM	4412	CA	LYS	735	41.441	16.333	41.841	1.00	14.61	A	C
ATOM	4413	CB	LYS	735	40.654	17.163	40.817	1.00	12.75	A	C
ATOM	4414	CG	LYS	735	40.385	18.578	41.285	1.00	13.62	A	C
ATOM	4415	CD	LYS	735	39.852	19.476	40.205	1.00	15.34	A	C
ATOM	4416	CE	LYS	735	39.966	20.928	40.651	1.00	17.00	A	C
ATOM	4417	NZ	LYS	735	39.520	21.902	39.614	1.00	20.61	A	N
ATOM	4418	C	LYS	735	40.935	16.659	43.243	1.00	14.82	A	C
ATOM	4419	O	LYS	735	41.660	17.243	44.047	1.00	16.52	A	O
ATOM	4420	N	TRP	736	39.692	16.298	43.522	1.00	13.69	A	N
ATOM	4421	CA	TRP	736	39.054	16.615	44.796	1.00	14.05	A	C
ATOM	4422	CB	TRP	736	37.568	16.814	44.553	1.00	14.12	A	C
ATOM	4423	CG	TRP	736	37.297	17.912	43.606	1.00	13.71	A	C
ATOM	4424	CD2	TRP	736	37.368	19.300	43.890	1.00	12.83	A	C
ATOM	4425	CE2	TRP	736	36.984	19.987	42.716	1.00	14.10	A	C
ATOM	4426	CE3	TRP	736	37.717	20.035	45.021	1.00	12.17	A	C
ATOM	4427	CD1	TRP	736	36.895	17.802	42.304	1.00	14.27	A	C
ATOM	4428	NE1	TRP	736	36.700	19.048	41.760	1.00	13.28	A	N
ATOM	4429	CZ2	TRP	736	36.939	21.378	42.648	1.00	14.43	A	C
ATOM	4430	CZ3	TRP	736	37.673	21.409	44.955	1.00	14.09	A	C

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ATOM	4431	CH2	TRP	736	37.285	22.071	43.774	1.00	14.68	A	C
ATOM	4432	C	TRP	736	39.269	15.734	46.033	1.00	14.83	A	C
ATOM	4433	O	TRP	736	38.553	15.884	47.033	1.00	13.14	A	O
ATOM	4434	N	GLY	737	40.233	14.817	45.959	1.00	17.20	A	N
ATOM	4435	CA	GLY	737	40.536	13.957	47.088	1.00	18.48	A	C
ATOM	4436	C	GLY	737	39.689	12.720	47.236	1.00	21.31	A	C
ATOM	4437	O	GLY	737	40.116	11.780	47.900	1.00	23.54	A	O
ATOM	4438	N	VAL	738	38.511	12.702	46.614	1.00	23.07	A	N
ATOM	4439	CA	VAL	738	37.586	11.555	46.681	1.00	25.15	A	C
ATOM	4440	CB	VAL	738	36.242	11.916	45.990	1.00	25.09	A	C
ATOM	4441	CG1	VAL	738	35.221	10.794	46.154	1.00	24.35	A	C
ATOM	4442	CG2	VAL	738	35.707	13.220	46.552	1.00	24.29	A	C
ATOM	4443	C	VAL	738	38.149	10.249	46.066	1.00	25.68	A	C
ATOM	4444	O	VAL	738	38.646	10.249	44.944	1.00	26.10	A	O
ATOM	4445	N	PRO	739	38.132	9.135	46.819	1.00	26.34	A	N
ATOM	4446	CD	PRO	739	37.764	8.991	48.240	1.00	26.95	A	C
ATOM	4447	CA	PRO	739	38.650	7.868	46.278	1.00	27.69	A	C
ATOM	4448	CB	PRO	739	38.918	7.053	47.540	1.00	26.56	A	C
ATOM	4449	CG	PRO	739	37.812	7.482	48.447	1.00	27.07	A	C
ATOM	4450	C	PRO	739	37.595	7.210	45.383	1.00	28.22	A	C
ATOM	4451	O	PRO	739	36.431	7.098	45.786	1.00	29.83	A	O
ATOM	4452	N	ILE	740	37.996	6.742	44.198	1.00	27.84	A	N
ATOM	4453	CA	ILE	740	37.038	6.144	43.260	1.00	27.82	A	C
ATOM	4454	CB	ILE	740	37.672	5.548	41.982	1.00	27.64	A	C
ATOM	4455	CG2	ILE	740	38.092	6.651	41.042	1.00	26.83	A	C
ATOM	4456	CG1	ILE	740	38.752	4.514	42.315	1.00	28.39	A	C
ATOM	4457	CD1	ILE	740	39.963	5.051	43.033	1.00	30.16	A	C
ATOM	4458	C	ILE	740	36.057	5.139	43.817	1.00	27.84	A	C
ATOM	4459	O	ILE	740	34.914	5.115	43.388	1.00	26.46	A	O
ATOM	4460	N	GLU	741	36.477	4.345	44.795	1.00	29.41	A	N
ATOM	4461	CA	GLU	741	35.582	3.353	45.385	1.00	31.08	A	C
ATOM	4462	CB	GLU	741	36.271	2.568	46.514	1.00	33.23	A	C
ATOM	4463	CG	GLU	741	36.946	3.405	47.601	1.00	38.00	A	C
ATOM	4464	CD	GLU	741	38.468	3.489	47.440	1.00	42.10	A	C
ATOM	4465	OE1	GLU	741	38.938	3.799	46.314	1.00	42.45	A	O
ATOM	4466	OE2	GLU	741	39.194	3.252	48.445	1.00	43.36	A	O
ATOM	4467	C	GLU	741	34.262	3.960	45.873	1.00	30.63	A	C
ATOM	4468	O	GLU	741	33.247	3.266	45.957	1.00	31.16	A	O
ATOM	4469	N	LYS	742	34.270	5.261	46.151	1.00	29.17	A	N
ATOM	4470	CA	LYS	742	33.071	5.949	46.611	1.00	28.14	A	C
ATOM	4471	CB	LYS	742	33.447	7.230	47.364	1.00	30.64	A	C
ATOM	4472	CG	LYS	742	34.349	7.043	48.585	1.00	33.55	A	C
ATOM	4473	CD	LYS	742	33.639	6.299	49.721	1.00	36.70	A	C
ATOM	4474	CE	LYS	742	34.435	6.323	51.032	1.00	37.19	A	C
ATOM	4475	NZ	LYS	742	34.398	7.659	51.707	1.00	37.39	A	N
ATOM	4476	C	LYS	742	32.180	6.312	45.424	1.00	26.30	A	C
ATOM	4477	O	LYS	742	31.038	6.728	45.613	1.00	25.59	A	O
ATOM	4478	N	ILE	743	32.723	6.171	44.212	1.00	23.93	A	N
ATOM	4479	CA	ILE	743	32.016	6.491	42.961	1.00	20.59	A	C
ATOM	4480	CB	ILE	743	32.788	7.553	42.141	1.00	19.04	A	C
ATOM	4481	CG2	ILE	743	32.039	7.876	40.867	1.00	18.53	A	C
ATOM	4482	CG1	ILE	743	32.990	8.825	42.957	1.00	16.72	A	C
ATOM	4483	CD1	ILE	743	31.701	9.519	43.322	1.00	17.06	A	C
ATOM	4484	C	ILE	743	31.793	5.268	42.059	1.00	19.14	A	C
ATOM	4485	O	ILE	743	30.743	5.136	41.439	1.00	17.59	A	O
ATOM	4486	N	TYR	744	32.815	4.425	41.945	1.00	19.05	A	N
ATOM	4487	CA	TYR	744	32.774	3.200	41.139	1.00	19.59	A	C
ATOM	4488	CB	TYR	744	33.895	3.195	40.093	1.00	17.12	A	C
ATOM	4489	CG	TYR	744	33.689	4.111	38.913	1.00	16.10	A	C
ATOM	4490	CD1	TYR	744	32.422	4.569	38.571	1.00	14.82	A	C
ATOM	4491	CE1	TYR	744	32.237	5.397	37.477	1.00	14.18	A	C
ATOM	4492	CD2	TYR	744	34.769	4.512	38.121	1.00	14.13	A	C
ATOM	4493	CE2	TYR	744	34.587	5.345	37.024	1.00	12.25	A	C

ATOM	4494	CZ	TYR	744	33.322	5.782	36.712	1.00	13.02	A	C
ATOM	4495	OH	TYR	744	33.137	6.623	35.642	1.00	15.53	A	O
ATOM	4496	C	TYR	744	32.925	1.939	42.009	1.00	21.51	A	C
ATOM	4497	O	TYR	744	33.868	1.812	42.805	1.00	19.38	A	O
ATOM	4498	N	ASN	745	32.010	0.990	41.835	1.00	24.14	A	N
ATOM	4499	CA	ASN	745	32.078	-0.246	42.597	1.00	26.51	A	C
ATOM	4500	CB	ASN	745	30.682	-0.853	42.777	1.00	25.81	A	C
ATOM	4501	CG	ASN	745	30.053	-1.282	41.477	1.00	26.63	A	C
ATOM	4502	OD1	ASN	745	30.742	-1.667	40.539	1.00	27.96	A	O
ATOM	4503	ND2	ASN	745	28.727	-1.256	41.427	1.00	27.15	A	N
ATOM	4504	C	ASN	745	33.055	-1.239	41.956	1.00	28.44	A	C
ATOM	4505	O	ASN	745	33.829	-0.869	41.067	1.00	28.37	A	O
ATOM	4506	N	LYS	746	32.991	-2.495	42.399	1.00	30.89	A	N
ATOM	4507	CA	LYS	746	33.861	-3.573	41.916	1.00	32.63	A	C
ATOM	4508	CB	LYS	746	33.556	-4.869	42.682	1.00	36.71	A	C
ATOM	4509	CG	LYS	746	34.308	-6.131	42.212	1.00	41.14	A	C
ATOM	4510	CD	LYS	746	35.748	-6.164	42.698	1.00	44.39	A	C
ATOM	4511	CE	LYS	746	36.311	-7.583	42.662	1.00	46.42	A	C
ATOM	4512	NZ	LYS	746	37.733	-7.625	43.126	1.00	47.11	A	N
ATOM	4513	C	LYS	746	33.810	-3.841	40.408	1.00	32.14	A	C
ATOM	4514	O	LYS	746	34.827	-3.696	39.723	1.00	33.28	A	O
ATOM	4515	N	THR	747	32.640	-4.230	39.894	1.00	29.16	A	N
ATOM	4516	CA	THR	747	32.504	-4.546	38.471	1.00	26.87	A	C
ATOM	4517	CB	THR	747	31.121	-5.229	38.145	1.00	27.59	A	C
ATOM	4518	OG1	THR	747	30.244	-4.303	37.492	1.00	28.32	A	O
ATOM	4519	CG2	THR	747	30.449	-5.733	39.419	1.00	27.84	A	C
ATOM	4520	C	THR	747	32.777	-3.343	37.559	1.00	24.62	A	C
ATOM	4521	O	THR	747	33.269	-3.504	36.434	1.00	23.70	A	O
ATOM	4522	N	GLN	748	32.486	-2.146	38.070	1.00	22.49	A	N
ATOM	4523	CA	GLN	748	32.697	-0.892	37.341	1.00	19.88	A	C
ATOM	4524	CB	GLN	748	31.846	0.234	37.931	1.00	17.06	A	C
ATOM	4525	CG	GLN	748	30.356	-0.056	37.914	1.00	16.18	A	C
ATOM	4526	CD	GLN	748	29.537	1.031	38.567	1.00	13.56	A	C
ATOM	4527	OE1	GLN	748	28.388	1.264	38.199	1.00	13.34	A	O
ATOM	4528	NE2	GLN	748	30.122	1.698	39.548	1.00	11.80	A	N
ATOM	4529	C	GLN	748	34.165	-0.488	37.367	1.00	19.37	A	C
ATOM	4530	O	GLN	748	34.679	0.073	36.400	1.00	19.98	A	O
ATOM	4531	N	ARG	749	34.846	-0.766	38.470	1.00	18.56	A	N
ATOM	4532	CA	ARG	749	36.256	-0.424	38.555	1.00	18.63	A	C
ATOM	4533	CB	ARG	749	36.759	-0.518	39.986	1.00	15.96	A	C
ATOM	4534	CG	ARG	749	37.073	0.842	40.571	1.00	14.37	A	C
ATOM	4535	CD	ARG	749	36.758	0.885	42.032	1.00	11.81	A	C
ATOM	4536	NE	ARG	749	37.358	-0.243	42.720	1.00	10.88	A	N
ATOM	4537	CZ	ARG	749	36.745	-0.957	43.652	1.00	10.35	A	C
ATOM	4538	NH1	ARG	749	35.499	-0.655	44.010	1.00	9.34	A	N
ATOM	4539	NH2	ARG	749	37.379	-1.980	44.217	1.00	10.49	A	N
ATOM	4540	C	ARG	749	37.084	-1.306	37.646	1.00	19.42	A	C
ATOM	4541	O	ARG	749	38.168	-0.905	37.205	1.00	21.01	A	O
ATOM	4542	N	GLU	750	36.559	-2.500	37.359	1.00	18.91	A	N
ATOM	4543	CA	GLU	750	37.232	-3.458	36.489	1.00	17.78	A	C
ATOM	4544	CB	GLU	750	36.785	-4.887	36.804	1.00	19.01	A	C
ATOM	4545	CG	GLU	750	37.168	-5.422	38.185	1.00	22.40	A	C
ATOM	4546	CD	GLU	750	36.423	-6.728	38.555	1.00	26.68	A	C
ATOM	4547	OE1	GLU	750	35.353	-7.008	37.955	1.00	26.96	A	O
ATOM	4548	OE2	GLU	750	36.895	-7.472	39.456	1.00	27.20	A	O
ATOM	4549	C	GLU	750	36.923	-3.126	35.031	1.00	14.93	A	C
ATOM	4550	O	GLU	750	37.717	-3.407	34.141	1.00	14.78	A	O
ATOM	4551	N	LYS	751	35.767	-2.519	34.792	1.00	13.34	A	N
ATOM	4552	CA	LYS	751	35.365	-2.150	33.432	1.00	12.54	A	C
ATOM	4553	CB	LYS	751	33.855	-1.903	33.356	1.00	11.43	A	C
ATOM	4554	CG	LYS	751	33.374	-1.287	32.057	1.00	11.85	A	C
ATOM	4555	CD	LYS	751	31.856	-1.174	32.057	1.00	14.21	A	C
ATOM	4556	CE	LYS	751	31.349	-0.293	30.958	1.00	14.45	A	C

ATOM	4557	NZ	LYS	751	31.931	-0.733	29.662	1.00	20.52	A	N
ATOM	4558	C	LYS	751	36.104	-0.912	32.980	1.00	10.71	A	C
ATOM	4559	O	LYS	751	36.512	-0.810	31.823	1.00	11.65	A	O
ATOM	4560	N	PHE	752	36.247	0.030	33.903	1.00	8.70	A	N
ATOM	4561	CA	PHE	752	36.932	1.277	33.648	1.00	6.79	A	C
ATOM	4562	CB	PHE	752	36.230	2.394	34.404	1.00	4.13	A	C
ATOM	4563	CG	PHE	752	34.858	2.699	33.904	1.00	2.09	A	C
ATOM	4564	CD1	PHE	752	34.640	2.967	32.558	1.00	3.09	A	C
ATOM	4565	CD2	PHE	752	33.785	2.741	34.775	1.00	1.00	A	C
ATOM	4566	CE1	PHE	752	33.371	3.274	32.090	1.00	1.00	A	C
ATOM	4567	CE2	PHE	752	32.526	3.043	34.327	1.00	1.00	A	C
ATOM	4568	CZ	PHE	752	32.310	3.312	32.981	1.00	1.00	A	C
ATOM	4569	C	PHE	752	38.407	1.224	34.066	1.00	7.80	A	C
ATOM	4570	O	PHE	752	39.065	2.261	34.142	1.00	8.70	A	O
ATOM	4571	N	ALA	753	38.929	0.025	34.327	1.00	7.43	A	N
ATOM	4572	CA	ALA	753	40.331	-0.132	34.739	1.00	7.04	A	C
ATOM	4573	CB	ALA	753	40.768	-1.591	34.640	1.00	5.80	A	C
ATOM	4574	C	ALA	753	41.283	0.746	33.938	1.00	6.57	A	C
ATOM	4575	O	ALA	753	41.971	1.591	34.492	1.00	6.60	A	O
ATOM	4576	N	TRP	754	41.251	0.587	32.622	1.00	7.16	A	N
ATOM	4577	CA	TRP	754	42.109	1.341	31.726	1.00	7.54	A	C
ATOM	4578	CB	TRP	754	41.709	1.062	30.281	1.00	4.98	A	C
ATOM	4579	CG	TRP	754	40.315	1.451	29.951	1.00	3.66	A	C
ATOM	4580	CD2	TRP	754	39.875	2.725	29.482	1.00	1.00	A	C
ATOM	4581	CE2	TRP	754	38.485	2.635	29.268	1.00	1.00	A	C
ATOM	4582	CE3	TRP	754	40.520	3.933	29.223	1.00	1.00	A	C
ATOM	4583	CD1	TRP	754	39.212	0.662	30.006	1.00	5.63	A	C
ATOM	4584	NE1	TRP	754	38.101	1.364	29.593	1.00	3.98	A	N
ATOM	4585	CZ2	TRP	754	37.730	3.708	28.808	1.00	2.25	A	C
ATOM	4586	CZ3	TRP	754	39.770	5.003	28.766	1.00	1.00	A	C
ATOM	4587	CH2	TRP	754	38.389	4.885	28.564	1.00	1.81	A	C
ATOM	4588	C	TRP	754	42.109	2.846	31.989	1.00	9.30	A	C
ATOM	4589	O	TRP	754	43.098	3.523	31.717	1.00	9.93	A	O
ATOM	4590	N	ALA	755	41.005	3.363	32.523	1.00	10.08	A	N
ATOM	4591	CA	ALA	755	40.891	4.784	32.799	1.00	10.62	A	C
ATOM	4592	CB	ALA	755	39.442	5.228	32.701	1.00	9.35	A	C
ATOM	4593	C	ALA	755	41.481	5.151	34.153	1.00	11.88	A	C
ATOM	4594	O	ALA	755	42.179	6.152	34.269	1.00	12.70	A	O
ATOM	4595	N	ILE	756	41.233	4.332	35.169	1.00	12.02	A	N
ATOM	4596	CA	ILE	756	41.763	4.610	36.500	1.00	13.63	A	C
ATOM	4597	CB	ILE	756	41.189	3.655	37.552	1.00	10.32	A	C
ATOM	4598	CG2	ILE	756	41.501	4.186	38.930	1.00	9.94	A	C
ATOM	4599	CG1	ILE	756	39.676	3.555	37.408	1.00	7.73	A	C
ATOM	4600	CD1	ILE	756	39.086	2.347	38.070	1.00	6.85	A	C
ATOM	4601	C	ILE	756	43.296	4.523	36.540	1.00	17.12	A	C
ATOM	4602	O	ILE	756	43.952	5.243	37.299	1.00	19.18	A	O
ATOM	4603	N	ASP	757	43.856	3.611	35.752	1.00	20.12	A	N
ATOM	4604	CA	ASP	757	45.296	3.423	35.679	1.00	23.46	A	C
ATOM	4605	CB	ASP	757	45.606	2.041	35.081	1.00	25.50	A	C
ATOM	4606	CG	ASP	757	47.103	1.743	34.969	1.00	28.01	A	C
ATOM	4607	OD1	ASP	757	47.774	2.324	34.086	1.00	28.65	A	O
ATOM	4608	OD2	ASP	757	47.599	0.875	35.722	1.00	29.44	A	O
ATOM	4609	C	ASP	757	45.848	4.550	34.812	1.00	25.87	A	C
ATOM	4610	O	ASP	757	46.598	5.385	35.284	1.00	27.60	A	O
ATOM	4611	N	MET	758	45.436	4.594	33.554	1.00	29.35	A	N
ATOM	4612	CA	MET	758	45.889	5.630	32.638	1.00	33.63	A	C
ATOM	4613	CB	MET	758	46.051	5.049	31.227	1.00	34.44	A	C
ATOM	4614	CG	MET	758	45.966	6.056	30.075	1.00	35.95	A	C
ATOM	4615	SD	MET	758	44.369	5.944	29.204	1.00	38.03	A	S
ATOM	4616	CE	MET	758	44.617	4.385	28.327	1.00	34.31	A	C
ATOM	4617	C	MET	758	44.953	6.841	32.634	1.00	36.66	A	C
ATOM	4618	O	MET	758	43.938	6.848	31.942	1.00	38.29	A	O
ATOM	4619	N	ALA	759	45.282	7.835	33.458	1.00	39.52	A	N

ATOM	4620	CA	ALA	759	44.526	9.093	33.586	1.00	40.51	A	C
ATOM	4621	CB	ALA	759	43.015	8.845	33.668	1.00	40.88	A	C
ATOM	4622	C	ALA	759	45.004	9.859	34.824	1.00	40.89	A	C
ATOM	4623	O	ALA	759	45.567	9.271	35.765	1.00	40.75	A	O
ATOM	4624	N	ASP	760	44.746	11.162	34.833	1.00	40.29	A	N
ATOM	4625	CA	ASP	760	45.173	12.004	35.934	1.00	40.57	A	C
ATOM	4626	CB	ASP	760	46.577	12.530	35.652	1.00	43.20	A	C
ATOM	4627	CG	ASP	760	46.587	13.600	34.576	1.00	45.79	A	C
ATOM	4628	OD1	ASP	760	47.252	14.636	34.799	1.00	46.16	A	O
ATOM	4629	OD2	ASP	760	45.912	13.416	33.529	1.00	46.25	A	O
ATOM	4630	C	ASP	760	44.235	13.184	36.139	1.00	39.52	A	C
ATOM	4631	O	ASP	760	43.310	13.399	35.356	1.00	40.05	A	O
ATOM	4632	N	GLU	761	44.551	13.992	37.149	1.00	37.40	A	N
ATOM	4633	CA	GLU	761	43.764	15.161	37.513	1.00	35.44	A	C
ATOM	4634	CB	GLU	761	44.318	15.802	38.791	1.00	38.58	A	C
ATOM	4635	CG	GLU	761	45.825	15.641	39.001	1.00	45.33	A	C
ATOM	4636	CD	GLU	761	46.178	14.457	39.913	1.00	49.90	A	C
ATOM	4637	OE1	GLU	761	46.155	14.641	41.157	1.00	51.80	A	O
ATOM	4638	OE2	GLU	761	46.476	13.347	39.394	1.00	50.96	A	O
ATOM	4639	C	GLU	761	43.650	16.203	36.420	1.00	32.20	A	C
ATOM	4640	O	GLU	761	42.682	16.964	36.382	1.00	31.86	A	O
ATOM	4641	N	ASP	762	44.597	16.189	35.490	1.00	28.75	A	N
ATOM	4642	CA	ASP	762	44.603	17.165	34.409	1.00	25.79	A	C
ATOM	4643	CB	ASP	762	46.043	17.580	34.084	1.00	29.97	A	C
ATOM	4644	CG	ASP	762	46.813	18.059	35.311	1.00	33.93	A	C
ATOM	4645	OD1	ASP	762	46.601	19.218	35.746	1.00	36.72	A	O
ATOM	4646	OD2	ASP	762	47.636	17.273	35.837	1.00	34.80	A	O
ATOM	4647	C	ASP	762	43.894	16.750	33.125	1.00	21.35	A	C
ATOM	4648	O	ASP	762	44.083	17.384	32.089	1.00	20.37	A	O
ATOM	4649	N	TYR	763	43.065	15.714	33.186	1.00	16.84	A	N
ATOM	4650	CA	TYR	763	42.360	15.256	31.992	1.00	13.29	A	C
ATOM	4651	CB	TYR	763	41.725	13.887	32.208	1.00	10.42	A	C
ATOM	4652	CG	TYR	763	40.918	13.413	31.011	1.00	8.80	A	C
ATOM	4653	CD1	TYR	763	41.552	12.962	29.855	1.00	6.46	A	C
ATOM	4654	CE1	TYR	763	40.824	12.533	28.755	1.00	4.30	A	C
ATOM	4655	CD2	TYR	763	39.522	13.422	31.031	1.00	6.62	A	C
ATOM	4656	CE2	TYR	763	38.788	12.993	29.931	1.00	6.42	A	C
ATOM	4657	CZ	TYR	763	39.448	12.548	28.796	1.00	5.93	A	C
ATOM	4658	OH	TYR	763	38.733	12.108	27.706	1.00	4.77	A	O
ATOM	4659	C	TYR	763	41.299	16.214	31.503	1.00	12.45	A	C
ATOM	4660	O	TYR	763	40.566	16.796	32.288	1.00	12.69	A	O
ATOM	4661	N	GLU	764	41.204	16.339	30.189	1.00	13.71	A	N
ATOM	4662	CA	GLU	764	40.225	17.212	29.569	1.00	16.35	A	C
ATOM	4663	CB	GLU	764	40.865	18.522	29.131	1.00	17.23	A	C
ATOM	4664	CG	GLU	764	41.431	19.339	30.252	1.00	22.47	A	C
ATOM	4665	CD	GLU	764	42.045	20.638	29.780	1.00	24.82	A	C
ATOM	4666	OE1	GLU	764	42.050	21.607	30.576	1.00	26.16	A	O
ATOM	4667	OE2	GLU	764	42.524	20.687	28.623	1.00	26.41	A	O
ATOM	4668	C	GLU	764	39.589	16.567	28.351	1.00	17.40	A	C
ATOM	4669	O	GLU	764	40.276	16.152	27.416	1.00	17.34	A	O
ATOM	4670	N	PHE	765	38.267	16.470	28.383	1.00	18.80	A	N
ATOM	4671	CA	PHE	765	37.510	15.932	27.269	1.00	20.14	A	C
ATOM	4672	CB	PHE	765	36.034	15.801	27.663	1.00	18.10	A	C
ATOM	4673	CG	PHE	765	35.227	14.941	26.740	1.00	16.77	A	C
ATOM	4674	CD1	PHE	765	35.184	13.571	26.916	1.00	17.36	A	C
ATOM	4675	CD2	PHE	765	34.504	15.494	25.699	1.00	15.97	A	C
ATOM	4676	CE1	PHE	765	34.435	12.762	26.067	1.00	15.73	A	C
ATOM	4677	CE2	PHE	765	33.754	14.686	24.849	1.00	15.08	A	C
ATOM	4678	CZ	PHE	765	33.721	13.323	25.035	1.00	14.07	A	C
ATOM	4679	C	PHE	765	37.699	17.010	26.188	1.00	22.84	A	C
ATOM	4680	O	PHE	765	38.332	16.694	25.155	1.00	25.09	A	O
ATOM	4681	OXT	PHE	765	37.313	18.185	26.427	1.00	23.26	A	O
TER	4682		PHE	765						A	



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ATOM	4683	O5'	ADE	1	21.670	2.566	-2.806	1.00	60.98	ADNA	O
ATOM	4684	N9	ADE	1	20.476	-0.745	-3.990	1.00	61.03	ADNA	N
ATOM	4685	C4	ADE	1	20.175	-2.086	-3.928	1.00	61.18	ADNA	C
ATOM	4686	N3	ADE	1	18.979	-2.667	-4.138	1.00	60.84	ADNA	N
ATOM	4687	C2	ADE	1	19.071	-3.990	-4.007	1.00	60.12	ADNA	C
ATOM	4688	N1	ADE	1	20.140	-4.741	-3.716	1.00	59.55	ADNA	N
ATOM	4689	C6	ADE	1	21.326	-4.126	-3.510	1.00	60.07	ADNA	C
ATOM	4690	N6	ADE	1	22.393	-4.873	-3.226	1.00	59.80	ADNA	N
ATOM	4691	C5	ADE	1	21.363	-2.725	-3.613	1.00	60.65	ADNA	C
ATOM	4692	N7	ADE	1	22.391	-1.806	-3.458	1.00	60.28	ADNA	N
ATOM	4693	C8	ADE	1	21.815	-0.650	-3.688	1.00	60.31	ADNA	C
ATOM	4694	C2'	ADE	1	18.985	1.065	-3.116	1.00	61.94	ADNA	C
ATOM	4695	C5'	ADE	1	21.245	3.253	-3.991	1.00	61.72	ADNA	C
ATOM	4696	C4'	ADE	1	19.996	2.648	-4.593	1.00	61.69	ADNA	C
ATOM	4697	O4'	ADE	1	20.274	1.313	-5.079	1.00	62.08	ADNA	O
ATOM	4698	C1'	ADE	1	19.550	0.341	-4.326	1.00	61.83	ADNA	C
ATOM	4699	C3'	ADE	1	18.850	2.498	-3.599	1.00	61.50	ADNA	C
ATOM	4700	O3'	ADE	1	17.590	2.722	-4.234	1.00	59.74	ADNA	O
ATOM	4701	P	ADE	2	16.310	3.078	-3.332	1.00	60.15	ADNA	P
ATOM	4702	O1P	ADE	2	15.170	3.367	-4.241	1.00	60.26	ADNA	O
ATOM	4703	O2P	ADE	2	16.733	4.103	-2.339	1.00	59.34	ADNA	O
ATOM	4704	O5'	ADE	2	15.999	1.705	-2.577	1.00	58.20	ADNA	O
ATOM	4705	N9	ADE	2	18.049	-1.734	-0.637	1.00	51.16	ADNA	N
ATOM	4706	C4	ADE	2	18.807	-2.880	-0.646	1.00	50.06	ADNA	C
ATOM	4707	N3	ADE	2	18.378	-4.138	-0.821	1.00	49.50	ADNA	N
ATOM	4708	C2	ADE	2	19.400	-4.991	-0.791	1.00	50.30	ADNA	C
ATOM	4709	N1	ADE	2	20.704	-4.748	-0.620	1.00	50.63	ADNA	N
ATOM	4710	C6	ADE	2	21.103	-3.470	-0.445	1.00	50.81	ADNA	C
ATOM	4711	N6	ADE	2	22.404	-3.224	-0.279	1.00	51.35	ADNA	N
ATOM	4712	C5	ADE	2	20.113	-2.470	-0.452	1.00	50.10	ADNA	C
ATOM	4713	N7	ADE	2	20.178	-1.095	-0.298	1.00	49.63	ADNA	N
ATOM	4714	C8	ADE	2	18.932	-0.707	-0.408	1.00	50.48	ADNA	C
ATOM	4715	C2'	ADE	2	15.872	-0.563	-0.085	1.00	53.10	ADNA	C
ATOM	4716	C5'	ADE	2	15.362	0.632	-3.271	1.00	55.95	ADNA	C
ATOM	4717	C4'	ADE	2	15.172	-0.570	-2.373	1.00	54.79	ADNA	C
ATOM	4718	O4'	ADE	2	16.395	-1.338	-2.232	1.00	54.24	ADNA	O
ATOM	4719	C1'	ADE	2	16.603	-1.652	-0.860	1.00	52.72	ADNA	C
ATOM	4720	C3'	ADE	2	14.650	-0.316	-0.957	1.00	53.98	ADNA	C
ATOM	4721	O3'	ADE	2	13.632	-1.282	-0.659	1.00	53.42	ADNA	O
ATOM	4722	P	ADE	3	12.631	-1.042	0.577	1.00	52.39	ADNA	P
ATOM	4723	O1P	ADE	3	11.295	-0.645	0.073	1.00	52.31	ADNA	O
ATOM	4724	O2P	ADE	3	13.329	-0.171	1.558	1.00	52.71	ADNA	O
ATOM	4725	O5'	ADE	3	12.497	-2.494	1.200	1.00	49.51	ADNA	O
ATOM	4726	N9	ADE	3	16.956	-4.770	2.429	1.00	36.21	ADNA	N
ATOM	4727	C4	ADE	3	18.238	-5.259	2.346	1.00	34.39	ADNA	C
ATOM	4728	N3	ADE	3	18.611	-6.519	2.077	1.00	33.58	ADNA	N
ATOM	4729	C2	ADE	3	19.935	-6.624	2.083	1.00	33.60	ADNA	C
ATOM	4730	N1	ADE	3	20.860	-5.687	2.305	1.00	32.58	ADNA	N
ATOM	4731	C6	ADE	3	20.456	-4.430	2.568	1.00	32.70	ADNA	C
ATOM	4732	N6	ADE	3	21.387	-3.495	2.774	1.00	30.82	ADNA	N
ATOM	4733	C5	ADE	3	19.068	-4.186	2.600	1.00	32.89	ADNA	C
ATOM	4734	N7	ADE	3	18.324	-3.040	2.845	1.00	32.96	ADNA	N
ATOM	4735	C8	ADE	3	17.083	-3.439	2.733	1.00	33.49	ADNA	C
ATOM	4736	C2'	ADE	3	14.840	-5.524	3.473	1.00	40.34	ADNA	C
ATOM	4737	C5'	ADE	3	13.604	-3.063	1.867	1.00	46.29	ADNA	C
ATOM	4738	C4'	ADE	3	13.653	-4.553	1.642	1.00	43.21	ADNA	C
ATOM	4739	O4'	ADE	3	14.985	-4.888	1.196	1.00	41.82	ADNA	O
ATOM	4740	C1'	ADE	3	15.720	-5.528	2.234	1.00	38.76	ADNA	C
ATOM	4741	C3'	ADE	3	13.436	-5.332	2.932	1.00	42.31	ADNA	C
ATOM	4742	O3'	ADE	3	12.806	-6.582	2.681	1.00	41.53	ADNA	O
ATOM	4743	P	ADE	4	12.366	-7.494	3.920	1.00	41.25	ADNA	P
ATOM	4744	O1P	ADE	4	11.373	-8.487	3.421	1.00	40.72	ADNA	O
ATOM	4745	O2P	ADE	4	12.004	-6.578	5.037	1.00	40.76	ADNA	O

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ATOM	4746	O5'	ADE	4	13.712	-8.242	4.331	1.00	38.31	ADNA	O
ATOM	4747	N9	ADE	4	17.886	-7.275	5.568	1.00	20.43	ADNA	N
ATOM	4748	C4	ADE	4	19.233	-6.986	5.505	1.00	18.53	ADNA	C
ATOM	4749	N3	ADE	4	20.241	-7.833	5.232	1.00	18.62	ADNA	N
ATOM	4750	C2	ADE	4	21.410	-7.213	5.277	1.00	14.56	ADNA	C
ATOM	4751	N1	ADE	4	21.678	-5.947	5.547	1.00	14.74	ADNA	N
ATOM	4752	C6	ADE	4	20.658	-5.112	5.821	1.00	16.17	ADNA	C
ATOM	4753	N6	ADE	4	20.949	-3.839	6.101	1.00	15.15	ADNA	N
ATOM	4754	C5	ADE	4	19.349	-5.644	5.796	1.00	16.36	ADNA	C
ATOM	4755	N7	ADE	4	18.099	-5.084	6.024	1.00	16.07	ADNA	N
ATOM	4756	C8	ADE	4	17.269	-6.093	5.882	1.00	17.77	ADNA	C
ATOM	4757	C2'	ADE	4	16.201	-9.054	6.303	1.00	26.67	ADNA	C
ATOM	4758	C5'	ADE	4	14.384	-9.094	3.418	1.00	34.14	ADNA	C
ATOM	4759	C4'	ADE	4	15.647	-9.638	4.044	1.00	30.87	ADNA	C
ATOM	4760	O4'	ADE	4	16.697	-8.628	4.059	1.00	28.82	ADNA	O
ATOM	4761	C1'	ADE	4	17.295	-8.604	5.345	1.00	24.84	ADNA	C
ATOM	4762	C3'	ADE	4	15.489	-10.125	5.487	1.00	28.87	ADNA	C
ATOM	4763	O3'	ADE	4	16.126	-11.403	5.639	1.00	29.84	ADNA	O
ATOM	4764	P	ADE	5	15.742	-12.344	6.888	1.00	30.94	ADNA	P
ATOM	4765	O1P	ADE	5	15.323	-13.678	6.380	1.00	29.78	ADNA	O
ATOM	4766	O2P	ADE	5	14.819	-11.548	7.748	1.00	28.04	ADNA	O
ATOM	4767	O5'	ADE	5	17.127	-12.551	7.637	1.00	26.51	ADNA	O
ATOM	4768	N9	ADE	5	20.495	-8.919	8.567	1.00	11.05	ADNA	N
ATOM	4769	C4	ADE	5	21.297	-7.802	8.670	1.00	9.20	ADNA	C
ATOM	4770	N3	ADE	5	22.641	-7.740	8.573	1.00	7.38	ADNA	N
ATOM	4771	C2	ADE	5	23.063	-6.480	8.725	1.00	6.31	ADNA	C
ATOM	4772	N1	ADE	5	22.347	-5.365	8.940	1.00	3.89	ADNA	N
ATOM	4773	C6	ADE	5	21.002	-5.470	9.027	1.00	5.74	ADNA	C
ATOM	4774	N6	ADE	5	20.279	-4.364	9.218	1.00	2.93	ADNA	N
ATOM	4775	C5	ADE	5	20.436	-6.745	8.901	1.00	6.67	ADNA	C
ATOM	4776	N7	ADE	5	19.126	-7.187	8.956	1.00	7.66	ADNA	N
ATOM	4777	C8	ADE	5	19.216	-8.477	8.741	1.00	7.93	ADNA	C
ATOM	4778	C2'	ADE	5	20.572	-11.220	9.506	1.00	18.84	ADNA	C
ATOM	4779	C5'	ADE	5	18.033	-11.471	7.713	1.00	23.17	ADNA	C
ATOM	4780	C4'	ADE	5	19.452	-11.949	7.547	1.00	20.13	ADNA	C
ATOM	4781	O4'	ADE	5	20.218	-10.775	7.214	1.00	19.04	ADNA	O
ATOM	4782	C1'	ADE	5	20.921	-10.299	8.342	1.00	16.26	ADNA	C
ATOM	4783	C3'	ADE	5	20.041	-12.474	8.845	1.00	19.26	ADNA	C
ATOM	4784	O3'	ADE	5	21.084	-13.427	8.634	1.00	20.01	ADNA	O
ATOM	4785	P	GUA	6	21.804	-14.088	9.914	1.00	21.00	ADNA	P
ATOM	4786	O1P	GUA	6	20.772	-14.092	10.988	1.00	19.13	ADNA	O
ATOM	4787	O2P	GUA	6	22.476	-15.361	9.530	1.00	18.07	ADNA	O
ATOM	4788	O5'	GUA	6	22.925	-13.022	10.298	1.00	17.04	ADNA	O
ATOM	4789	N9	GUA	6	23.647	-9.003	11.599	1.00	4.77	ADNA	N
ATOM	4790	C4	GUA	6	23.755	-7.632	11.731	1.00	3.28	ADNA	C
ATOM	4791	N3	GUA	6	24.894	-6.896	11.630	1.00	3.01	ADNA	N
ATCM	4792	C2	GUA	6	24.659	-5.589	11.807	1.00	4.46	ADNA	C
ATOM	4793	N2	GUA	6	25.662	-4.689	11.700	1.00	2.61	ADNA	N
ATOM	4794	N1	GUA	6	23.418	-5.069	12.090	1.00	2.41	ADNA	N
ATOM	4795	C6	GUA	6	22.249	-5.816	12.210	1.00	2.84	ADNA	C
ATOM	4796	O6	GUA	6	21.189	-5.253	12.487	1.00	6.20	ADNA	O
ATOM	4797	C5	GUA	6	22.475	-7.194	11.992	1.00	1.00	ADNA	C
ATOM	4798	N7	GUA	6	21.586	-8.255	12.008	1.00	1.00	ADNA	N
ATOM	4799	C8	GUA	6	22.324	-9.303	11.772	1.00	1.00	ADNA	C
ATOM	4800	C2'	GUA	6	24.752	-11.136	12.289	1.00	10.84	ADNA	C
ATOM	4801	C5'	GUA	6	23.983	-12.761	9.391	1.00	16.17	ADNA	C
ATOM	4802	C4'	GUA	6	25.013	-11.860	10.020	1.00	12.49	ADNA	C
ATOM	4803	O4'	GUA	6	24.498	-10.513	10.061	1.00	12.39	ADNA	O
ATOM	4804	C1'	GUA	6	24.725	-9.953	11.339	1.00	8.94	ADNA	C
ATOM	4805	C3'	GUA	6	25.388	-12.230	11.450	1.00	12.20	ADNA	C
ATOM	4806	O3'	GUA	6	26.806	-12.221	11.584	1.00	14.50	ADNA	O
ATOM	4807	P	ADE	7	27.493	-12.789	12.929	1.00	16.16	ADNA	P
ATOM	4808	O1P	ADE	7	28.752	-13.489	12.532	1.00	13.96	ADNA	O

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ATOM	4809	O2P	ADE	7	26.474	-13.516	13.731	1.00	10.40	ADNA	O
ATOM	4810	O5'	ADE	7	27.927	-11.432	13.637	1.00	10.96	ADNA	O
ATOM	4811	N9	ADE	7	25.778	-7.773	15.056	1.00	1.00	ADNA	N
ATOM	4812	C4	ADE	7	25.122	-6.574	15.199	1.00	1.00	ADNA	C
ATOM	4813	N3	ADE	7	25.666	-5.346	15.209	1.00	1.65	ADNA	N
ATOM	4814	C2	ADE	7	24.731	-4.418	15.379	1.00	2.29	ADNA	C
ATOM	4815	N1	ADE	7	23.414	-4.564	15.545	1.00	1.50	ADNA	N
ATOM	4816	C6	ADE	7	22.900	-5.816	15.548	1.00	2.60	ADNA	C
ATOM	4817	N6	ADE	7	21.581	-5.970	15.762	1.00	1.00	ADNA	N
ATOM	4818	C5	ADE	7	23.793	-6.887	15.346	1.00	1.00	ADNA	C
ATOM	4819	N7	ADE	7	23.606	-8.252	15.278	1.00	1.00	ADNA	N
ATOM	4820	C8	ADE	7	24.810	-8.731	15.108	1.00	1.00	ADNA	C
ATOM	4821	C2'	ADE	7	27.925	-8.892	15.842	1.00	4.57	ADNA	C
ATOM	4822	C5'	ADE	7	28.631	-10.461	12.872	1.00	7.03	ADNA	C
ATOM	4823	C4'	ADE	7	28.736	-9.152	13.612	1.00	4.89	ADNA	C
ATOM	4824	O4'	ADE	7	27.467	-8.474	13.614	1.00	2.05	ADNA	O
ATOM	4825	C1'	ADE	7	27.230	-7.938	14.892	1.00	1.85	ADNA	C
ATOM	4826	C3'	ADE	7	29.190	-9.223	15.067	1.00	4.98	ADNA	C
ATOM	4827	O3'	ADE	7	30.207	-8.228	15.268	1.00	9.63	ADNA	O
ATOM	4828	P	CYT	8	31.114	-8.263	16.589	1.00	13.19	ADNA	P
ATOM	4829	O1P	CYT	8	32.144	-7.225	16.411	1.00	11.15	ADNA	O
ATOM	4830	O2P	CYT	8	31.517	-9.649	16.870	1.00	9.59	ADNA	O
ATOM	4831	O5'	CYT	8	30.110	-7.782	17.724	1.00	11.97	ADNA	O
ATOM	4832	N1	CYT	8	26.182	-5.569	18.471	1.00	4.89	ADNA	N
ATOM	4833	C6	CYT	8	26.115	-6.935	18.516	1.00	4.86	ADNA	C
ATOM	4834	C2	CYT	8	25.010	-4.804	18.631	1.00	4.77	ADNA	C
ATOM	4835	O2	CYT	8	25.100	-3.571	18.677	1.00	6.85	ADNA	O
ATOM	4836	N3	CYT	8	23.814	-5.432	18.739	1.00	1.65	ADNA	N
ATOM	4837	C4	CYT	8	23.758	-6.762	18.747	1.00	1.00	ADNA	C
ATOM	4838	N4	CYT	8	22.561	-7.330	18.846	1.00	1.00	ADNA	N
ATOM	4839	C5	CYT	8	24.931	-7.569	18.652	1.00	1.66	ADNA	C
ATOM	4840	C2'	CYT	8	28.198	-4.317	19.446	1.00	12.15	ADNA	C
ATOM	4841	C5'	CYT	8	30.408	-6.653	18.549	1.00	12.53	ADNA	C
ATOM	4842	C4'	CYT	8	29.729	-5.422	18.001	1.00	12.02	ADNA	C
ATOM	4843	O4'	CYT	8	28.369	-5.779	17.643	1.00	8.47	ADNA	O
ATOM	4844	C1'	CYT	8	27.467	-4.869	18.233	1.00	6.90	ADNA	C
ATOM	4845	C3'	CYT	8	29.638	-4.228	18.957	1.00	13.28	ADNA	C
ATOM	4846	O3'	CYT	8	29.844	-3.017	18.205	1.00	21.28	ADNA	O
ATOM	4847	P	URI	9	30.295	-1.617	18.932	1.00	31.32	ADNA	P
ATOM	4848	O1P	URI	9	29.375	-0.539	18.431	1.00	29.44	ADNA	O
ATOM	4849	O2P	URI	9	31.762	-1.479	18.697	1.00	29.25	ADNA	O
ATOM	4850	O5'	URI	9	30.052	-1.745	20.521	1.00	23.71	ADNA	O
ATOM	4851	N1	URI	9	25.251	-2.700	22.173	1.00	1.00	ADNA	N
ATOM	4852	C6	URI	9	26.105	-3.788	22.122	1.00	1.00	ADNA	C
ATOM	4853	C2	URI	9	23.888	-2.883	22.331	1.00	1.00	ADNA	C
ATOM	4854	O2	URI	9	23.104	-1.958	22.463	1.00	1.00	ADNA	O
ATOM	4855	N3	URI	9	23.475	-4.194	22.336	1.00	1.00	ADNA	N
ATOM	4856	C4	URI	9	24.267	-5.325	22.219	1.00	1.48	ADNA	C
ATOM	4857	O4	URI	9	23.728	-6.420	21.998	1.00	1.00	ADNA	O
ATOM	4858	C5	URI	9	25.674	-5.057	22.141	1.00	1.00	ADNA	C
ATOM	4859	C2'	URI	9	26.657	-0.809	23.112	1.00	6.60	ADNA	C
ATOM	4860	C5'	URI	9	28.766	-2.036	21.075	1.00	14.21	ADNA	C
ATOM	4861	C4'	URI	9	27.860	-0.823	21.055	1.00	8.46	ADNA	C
ATOM	4862	O4'	URI	9	26.527	-1.312	20.802	1.00	7.35	ADNA	O
ATOM	4863	C1'	URI	9	25.754	-1.326	22.003	1.00	3.29	ADNA	C
ATOM	4864	C3'	URI	9	27.746	-0.050	22.367	1.00	8.93	ADNA	C
ATOM	4865	O3'	URI	9	27.354	1.319	22.125	1.00	9.31	ADNA	O
ATOM	4866	P	URI	10	27.283	2.374	23.352	1.00	13.69	ADNA	P
ATOM	4867	O1P	URI	10	27.416	3.727	22.759	1.00	8.56	ADNA	O
ATOM	4868	O2P	URI	10	28.169	1.969	24.479	1.00	10.99	ADNA	O
ATOM	4869	O5'	URI	10	25.810	2.221	23.919	1.00	7.32	ADNA	O
ATOM	4870	N1	URI	10	22.971	-0.507	25.541	1.00	2.62	ADNA	N
ATOM	4871	C6	URI	10	24.262	-0.984	25.682	1.00	1.53	ADNA	C

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ATOM	4872	C2	URI	10	21.894	-1.383	25.535	1.00	2.11	ADNA	C
ATOM	4873	O2	URI	10	20.746	-1.010	25.459	1.00	2.98	ADNA	O
ATOM	4874	N3	URI	10	22.217	-2.709	25.633	1.00	1.00	ADNA	N
ATOM	4875	C4	URI	10	23.474	-3.246	25.748	1.00	1.78	ADNA	C
ATOM	4876	O4	URI	10	23.604	-4.466	25.667	1.00	6.09	ADNA	O
ATOM	4877	C5	URI	10	24.541	-2.285	25.793	1.00	1.00	ADNA	C
ATOM	4878	C2'	URI	10	23.405	1.818	26.392	1.00	5.10	ADNA	C
ATOM	4879	C5'	URI	10	24.757	2.972	23.368	1.00	3.03	ADNA	C
ATOM	4880	C4'	URI	10	23.503	2.759	24.173	1.00	2.24	ADNA	C
ATOM	4881	O4'	URI	10	23.145	1.356	24.124	1.00	3.79	ADNA	O
ATOM	4882	C1'	URI	10	22.684	0.935	25.394	1.00	3.99	ADNA	C
ATOM	4883	C3'	URI	10	23.643	3.123	25.646	1.00	2.25	ADNA	C
TER	4884		URI	10						ADNA	
ATOM	4885	S5'	GUA	11	24.116	0.273	36.535	1.00	32.20	CDNA	S
ATOM	4886	N9	GUA	11	21.959	-2.592	33.020	1.00	27.97	CDNA	N
ATOM	4887	C4	GUA	11	21.161	-3.692	32.879	1.00	28.49	CDNA	C
ATOM	4888	N3	GUA	11	19.837	-3.682	32.634	1.00	29.27	CDNA	N
ATOM	4889	C2	GUA	11	19.347	-4.912	32.527	1.00	31.85	CDNA	C
ATOM	4890	N2	GUA	11	18.039	-5.100	32.291	1.00	29.13	CDNA	N
ATOM	4891	N1	GUA	11	20.107	-6.050	32.647	1.00	33.20	CDNA	N
ATOM	4892	C6	GUA	11	21.476	-6.068	32.910	1.00	33.27	CDNA	C
ATOM	4893	O6	GUA	11	22.074	-7.143	33.007	1.00	36.74	CDNA	O
ATOM	4894	C5	GUA	11	22.001	-4.773	33.029	1.00	30.30	CDNA	C
ATOM	4895	N7	GUA	11	23.299	-4.360	33.278	1.00	29.33	CDNA	N
ATOM	4896	C8	GUA	11	23.229	-3.061	33.263	1.00	29.13	CDNA	C
ATOM	4897	C2'	GUA	11	20.308	-0.944	33.763	1.00	25.60	CDNA	C
ATOM	4898	C5'	GUA	11	22.616	-0.463	35.891	1.00	27.54	CDNA	C
ATOM	4899	C4'	GUA	11	22.151	0.277	34.660	1.00	26.23	CDNA	C
ATOM	4900	O4'	GUA	11	22.599	-0.418	33.482	1.00	25.27	CDNA	O
ATOM	4901	C1'	GUA	11	21.546	-1.199	32.932	1.00	25.96	CDNA	C
ATOM	4902	C3'	GUA	11	20.638	0.310	34.545	1.00	25.94	CDNA	C
ATOM	4903	O3'	GUA	11	20.212	1.484	33.872	1.00	26.12	CDNA	O
ATOM	4904	P	GUA	12	19.265	2.511	34.640	1.00	26.86	CDNA	P
ATOM	4905	O1P	GUA	12	19.169	3.717	33.783	1.00	26.89	CDNA	O
ATOM	4906	O2P	GUA	12	19.792	2.625	36.023	1.00	26.14	CDNA	O
ATOM	4907	O5'	GUA	12	17.852	1.777	34.710	1.00	23.32	CDNA	O
ATOM	4908	N9	GUA	12	17.013	-1.635	35.784	1.00	18.45	CDNA	N
ATOM	4909	C4	GUA	12	17.136	-2.982	35.633	1.00	18.02	CDNA	C
ATOM	4910	N3	GUA	12	16.225	-3.787	35.063	1.00	17.51	CDNA	N
ATOM	4911	C2	GUA	12	16.625	-5.036	35.026	1.00	15.83	CDNA	C
ATOM	4912	N2	GUA	12	15.832	-5.9					



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ATOM	4998	C6	ADE	16	14.850	-7.540	47.663	1.00	28.35	CDNA C
ATOM	4999	N6	ADE	16	13.915	-6.590	47.654	1.00	27.71	CDNA N
ATOM	5000	C5	ADE	16	14.570	-8.904	47.534	1.00	28.55	CDNA C
ATOM	5001	N7	ADE	16	13.382	-9.605	47.395	1.00	28.17	CDNA N
ATOM	5002	C8	ADE	16	13.765	-10.853	47.281	1.00	29.64	CDNA C
ATOM	5003	C2'	ADE	16	15.383	-13.489	47.775	1.00	37.11	CDNA C
ATOM	5004	C5'	ADE	16	14.688	-14.372	44.623	1.00	34.15	CDNA C
ATOM	5005	C4'	ADE	16	15.860	-13.954	45.483	1.00	35.98	CDNA C
ATOM	5006	O4'	ADE	16	15.864	-12.524	45.704	1.00	35.90	CDNA O
ATOM	5007	C1'	ADE	16	15.901	-12.240	47.096	1.00	33.81	CDNA C
ATOM	5008	C3'	ADE	16	15.925	-14.585	46.868	1.00	38.48	CDNA C
ATOM	5009	O3'	ADE	16	17.294	-14.877	47.169	1.00	42.61	CDNA O
ATOM	5010	P	ADE	17	17.680	-15.563	48.573	1.00	46.83	CDNA P
ATOM	5011	O1P	ADE	17	18.670	-16.631	48.245	1.00	45.06	CDNA O
ATOM	5012	O2P	ADE	17	16.427	-15.910	49.315	1.00	44.93	CDNA O
ATOM	5013	O5'	ADE	17	18.431	-14.390	49.350	1.00	44.91	CDNA O
ATOM	5014	N9	ADE	17	17.466	-10.656	50.993	1.00	35.63	CDNA N
ATOM	5015	C4	ADE	17	17.084	-9.349	51.168	1.00	31.70	CDNA C
ATOM	5016	N3	ADE	17	17.882	-8.283	51.343	1.00	30.82	CDNA N
ATOM	5017	C2	ADE	17	17.158	-7.181	51.494	1.00	29.06	CDNA C
ATOM	5018	N1	ADE	17	15.833	-7.034	51.490	1.00	27.48	CDNA N
ATOM	5019	C6	ADE	17	15.064	-8.123	51.313	1.00	27.12	CDNA C
ATOM	5020	N6	ADE	17	13.745	-7.976	51.317	1.00	24.47	CDNA N
ATOM	5021	C5	ADE	17	15.704	-9.352	51.139	1.00	29.52	CDNA C
ATOM	5022	N7	ADE	17	15.218	-10.636	50.947	1.00	30.60	CDNA N
ATOM	5023	C8	ADE	17	16.300	-11.371	50.867	1.00	33.53	CDNA C
ATOM	5024	C2'	ADE	17	19.104	-12.388	51.803	1.00	42.92	CDNA C
ATOM	5025	C5'	ADE	17	19.577	-13.772	48.769	1.00	45.21	CDNA C
ATOM	5026	C4'	ADE	17	20.080	-12.642	49.637	1.00	44.74	CDNA C
ATOM	5027	O4'	ADE	17	19.143	-11.536	49.623	1.00	43.38	CDNA O
ATOM	5028	C1'	ADE	17	18.844	-11.152	50.957	1.00	40.20	CDNA C
ATOM	5029	C3'	ADE	17	20.307	-12.999	51.106	1.00	44.88	CDNA C
ATOM	5030	O3'	ADE	17	21.519	-12.387	51.566	1.00	47.38	CDNA O
ATOM	5031	P	URI	18	22.240	-12.937	52.893	1.00	48.72	CDNA P
ATOM	5032	O1P	URI	18	23.696	-13.024	52.601	1.00	47.39	CDNA O
ATOM	5033	O2P	URI	18	21.500	-14.148	53.344	1.00	49.06	CDNA O
ATOM	5034	O5'	URI	18	22.009	-11.777	53.958	1.00	46.11	CDNA O
ATOM	5035	N1	URI	18	17.807	-8.681	54.877	1.00	36.48	CDNA N
ATOM	5036	C6	URI	18	17.409	-9.990	54.689	1.00	34.92	CDNA C
ATOM	5037	C2	URI	18	16.874	-7.673	55.051	1.00	35.57	CDNA C
ATOM	5038	O2	URI	18	17.186	-6.502	55.204	1.00	34.02	CDNA O
ATOM	5039	N3	URI	18	15.562	-8.085	55.033	1.00	34.56	CDNA N
ATOM	5040	C4	URI	18	15.093	-9.376	54.858	1.00	34.45	CDNA C
ATOM	5041	O4	URI	18	13.876	-9.595	54.927	1.00	32.88	CDNA O
ATOM	5042	C5	URI	18	16.121	-10.362	54.669	1.00	32.94	CDNA C
ATOM	5043	C2'	URI	18	19.990	-8.807	56.119	1.00	40.58	CDNA C
ATOM	5044	C5'	URI	18	20.790	-11.052	53.963	1.00	43.90	CDNA C
ATOM	5045	C4'	URI	18	21.053	-9.575	54.131	1.00	42.07	CDNA C
ATOM	5046	O4'	URI	18	19.842	-8.882	53.762	1.00	40.39	CDNA O
ATOM	5047	C1'	URI	18	19.228	-8.304	54.902	1.00	38.56	CDNA C
ATOM	5048	C3'	URI	18	21.362	-9.150	55.564	1.00	42.69	CDNA C
ATOM	5049	O3'	URI	18	22.272	-8.033	55.586	1.00	44.06	CDNA O
ATOM	5050	P	URI	19	22.880	-7.507	56.992	1.00	45.10	CDNA P
ATOM	5051	O1P	URI	19	24.215	-6.916	56.704	1.00	43.34	CDNA O
ATOM	5052	O2P	URI	19	22.749	-8.559	58.043	1.00	43.44	CDNA O
ATOM	5053	O5'	URI	19	21.906	-6.313	57.388	1.00	44.42	CDNA O
ATOM	5054	N1	URI	19	17.767	-5.721	58.139	1.00	44.43	CDNA N
ATOM	5055	C6	URI	19	18.060	-7.034	58.416	1.00	43.84	CDNA C
ATOM	5056	C2	URI	19	16.474	-5.326	57.847	1.00	44.17	CDNA C
ATOM	5057	O2	URI	19	16.179	-4.178	57.565	1.00	43.42	CDNA O
ATOM	5058	N3	URI	19	15.540	-6.327	57.892	1.00	44.44	CDNA N
ATOM	5059	C4	URI	19	15.761	-7.654	58.181	1.00	43.99	CDNA C
ATOM	5060	O4	URI	19	14.803	-8.419	58.245	1.00	45.07	CDNA O

ATOM	5061	C5	URI	19	17.126	-7.991	58.445	1.00	43.07	CDNA C
ATOM	5062	C2'	URI	19	19.847	-4.797	59.233	1.00	47.17	CDNA C
ATOM	5063	C5'	URI	19	21.884	-5.122	56.618	1.00	45.63	CDNA C
ATOM	5064	C4'	URI	19	20.838	-4.180	57.157	1.00	46.55	CDNA C
ATOM	5065	O4'	URI	19	19.522	-4.744	56.942	1.00	47.36	CDNA O
ATOM	5066	C1'	URI	19	18.799	-4.678	58.153	1.00	45.67	CDNA C
ATOM	5067	C3'	URI	19	20.938	-3.913	58.658	1.00	47.33	CDNA C
ATOM	5068	O3'	URI	19	20.612	-2.545	58.904	1.00	49.18	CDNA O
ATOM	5069	P	URI	20	21.085	-1.842	60.268	1.00	50.52	CDNA P
ATOM	5070	O1P	URI	20	22.375	-1.154	60.003	1.00	50.22	CDNA O
ATOM	5071	O2P	URI	20	20.991	-2.841	61.364	1.00	50.56	CDNA O
ATOM	5072	O5'	URI	20	19.972	-0.736	60.518	1.00	50.04	CDNA O
ATOM	5073	N1	URI	20	16.424	-3.302	61.096	1.00	47.13	CDNA N
ATOM	5074	C6	URI	20	17.561	-3.989	61.471	1.00	45.82	CDNA C
ATOM	5075	C2	URI	20	15.202	-3.948	61.009	1.00	45.06	CDNA C
ATOM	5076	O2	URI	20	14.185	-3.390	60.647	1.00	44.40	CDNA O
ATOM	5077	N3	URI	20	15.219	-5.274	61.359	1.00	44.07	CDNA N
ATOM	5078	C4	URI	20	16.307	-6.008	61.765	1.00	43.50	CDNA C
ATOM	5079	O4	URI	20	16.147	-7.179	62.082	1.00	43.40	CDNA O
ATOM	5080	C5	URI	20	17.542	-5.287	61.802	1.00	43.57	CDNA C
ATOM	5081	C2'	URI	20	17.015	-0.974	61.881	1.00	50.06	CDNA C
ATOM	5082	C5'	URI	20	19.234	-0.196	59.428	1.00	49.94	CDNA C
ATOM	5083	C4'	URI	20	17.751	-0.262	59.717	1.00	50.03	CDNA C
ATOM	5084	O4'	URI	20	17.277	-1.632	59.672	1.00	50.21	CDNA O
ATOM	5085	C1'	URI	20	16.444	-1.859	60.795	1.00	48.91	CDNA C
ATOM	5086	C3'	URI	20	17.343	0.276	61.088	1.00	49.99	CDNA C
ATOM	5087	O3'	URI	20	16.163	1.053	60.967	1.00	50.25	CDNA O
ATOM	5088	P	URI	21	15.758	2.044	62.152	1.00	51.14	CDNA P
ATOM	5089	O1P	URI	21	15.803	3.432	61.624	1.00	49.54	CDNA O
ATOM	5090	O2P	URI	21	16.564	1.673	63.346	1.00	51.31	CDNA O
ATOM	5091	O5'	URI	21	14.247	1.670	62.437	1.00	50.96	CDNA O
ATOM	5092	N1	URI	21	12.700	-2.159	63.581	1.00	47.15	CDNA N
ATOM	5093	C6	URI	21	14.040	-2.044	63.875	1.00	46.20	CDNA C
ATOM	5094	C2	URI	21	12.053	-3.384	63.675	1.00	45.08	CDNA C
ATOM	5095	O2	URI	21	10.870	-3.535	63.411	1.00	42.72	CDNA O
ATOM	5096	N3	URI	21	12.847	-4.423	64.087	1.00	44.27	CDNA N
ATOM	5097	C4	URI	21	14.190	-4.371	64.399	1.00	43.70	CDNA C
ATOM	5098	O4	URI	21	14.770	-5.398	64.741	1.00	43.29	CDNA O
ATOM	5099	C5	URI	21	14.784	-3.079	64.270	1.00	44.06	CDNA C
ATOM	5100	C2'	URI	21	11.965	0.205	64.090	1.00	51.41	CDNA C
ATOM	5101	C5'	URI	21	13.309	1.652	61.383	1.00	51.65	CDNA C
ATOM	5102	C4'	URI	21	12.086	0.883	61.806	1.00	51.89	CDNA C
ATOM	5103	O4'	URI	21	12.413	-0.522	61.935	1.00	50.27	CDNA O
ATOM	5104	C1'	URI	21	11.904	-0.993	63.166	1.00	49.19	CDNA C
ATOM	5105	C3'	URI	21	11.518	1.312	63.157	1.00	52.62	CDNA C
ATOM	5106	O3'	URI	21	10.100	1.299	63.076	1.00	57.79	CDNA O
ATOM	5107	P	THY	22	9.241	2.303	63.580	1.00	61.75	CDNA P
ATOM	5108	O1P	THY	22	8.534	3.227	63.051	1.00	61.54	CDNA O
ATOM	5109	O2P	THY	22	10.127	2.858	65.041	1.00	61.43	CDNA O
ATOM	5110	O5'	THY	22	8.149	1.346	64.639	1.00	62.82	CDNA O
ATOM	5111	N1	THY	22	8.952	-2.638	66.236	1.00	63.91	CDNA N
ATOM	5112	C6	THY	22	10.062	-1.838	66.398	1.00	63.75	CDNA C
ATOM	5113	C2	THY	22	9.051	-4.015	66.289	1.00	63.77	CDNA C
ATOM	5114	O2	THY	22	8.090	-4.764	66.169	1.00	63.33	CDNA O
ATOM	5115	N3	THY	22	10.322	-4.489	66.497	1.00	63.74	CDNA N
ATOM	5116	C4	THY	22	11.474	-3.747	66.663	1.00	63.81	CDNA C
ATOM	5117	O4	THY	22	12.550	-4.317	66.839	1.00	64.32	CDNA O
ATOM	5118	C5	THY	22	11.296	-2.314	66.609	1.00	63.61	CDNA C
ATOM	5119	C5A	THY	22	12.489	-1.430	66.792	1.00	62.76	CDNA C
ATOM	5120	C2'	THY	22	7.272	-0.830	66.834	1.00	65.06	CDNA C
ATOM	5121	C5'	THY	22	7.188	0.668	63.826	1.00	64.14	CDNA C
ATOM	5122	C4'	THY	22	6.598	-0.511	64.567	1.00	64.62	CDNA C
ATOM	5123	O4'	THY	22	7.550	-1.602	64.653	1.00	64.52	CDNA O

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ATOM	5124	C1'	THY	22	7.618	-2.047	66.000	1.00	64.45	CDNA C
ATOM	5125	C3'	THY	22	6.152	-0.227	66.005	1.00	65.09	CDNA C
ATOM	5126	O3'	THY	22	4.982	-0.992	66.307	1.00	65.67	CDNA O
TER	5127		THY	22						CDNA
ATOM	5128	O5'	ADE	101	11.370	-16.922	67.356	1.00	57.28	BDNA O
ATOM	5129	N9	ADE	101	10.779	-11.477	67.335	1.00	52.35	BDNA N
ATOM	5130	C4	ADE	101	10.474	-10.137	67.387	1.00	50.95	BDNA C
ATOM	5131	N3	ADE	101	9.258	-9.579	67.534	1.00	51.79	BDNA N
ATOM	5132	C2	ADE	101	9.350	-8.250	67.561	1.00	50.45	BDNA C
ATOM	5133	N1	ADE	101	10.434	-7.477	67.463	1.00	50.08	BDNA N
ATOM	5134	C6	ADE	101	11.640	-8.068	67.309	1.00	49.81	BDNA C
ATOM	5135	N6	ADE	101	12.722	-7.292	67.206	1.00	50.32	BDNA N
ATOM	5136	C5	ADE	101	11.681	-9.472	67.267	1.00	49.77	BDNA C
ATOM	5137	N7	ADE	101	12.727	-10.372	67.127	1.00	49.83	BDNA N
ATOM	5138	C8	ADE	101	12.142	-11.543	67.169	1.00	51.14	BDNA C
ATOM	5139	C2'	ADE	101	9.636	-13.367	66.160	1.00	56.14	BDNA C
ATOM	5140	C5'	ADE	101	11.530	-15.558	67.767	1.00	57.41	BDNA C
ATOM	5141	C4'	ADE	101	10.191	-14.879	67.930	1.00	56.81	BDNA C
ATOM	5142	O4'	ADE	101	10.387	-13.518	68.384	1.00	55.93	BDNA O
ATOM	5143	C1'	ADE	101	9.839	-12.594	67.451	1.00	54.19	BDNA C
ATOM	5144	C3'	ADE	101	9.378	-14.784	66.641	1.00	57.05	BDNA C
ATOM	5145	O3'	ADE	101	7.991	-14.993	66.915	1.00	57.94	BDNA O
ATOM	5146	P	ADE	102	6.955	-15.136	65.697	1.00	58.88	BDNA P
ATOM	5147	O1P	ADE	102	5.638	-15.500	66.278	1.00	58.37	BDNA O
ATOM	5148	O2P	ADE	102	7.554	-15.993	64.643	1.00	58.30	BDNA O
ATOM	5149	O5'	ADE	102	6.840	-13.653	65.139	1.00	57.60	BDNA O
ATOM	5150	N9	ADE	102	8.924	-10.200	63.728	1.00	55.68	BDNA N
ATOM	5151	C4	ADE	102	9.592	-9.015	63.914	1.00	55.61	BDNA C
ATOM	5152	N3	ADE	102	9.053	-7.803	64.139	1.00	55.54	BDNA N
ATOM	5153	C2	ADE	102	10.007	-6.877	64.246	1.00	55.85	BDNA C
ATOM	5154	N1	ADE	102	11.339	-7.015	64.156	1.00	55.79	BDNA N
ATOM	5155	C6	ADE	102	11.848	-8.248	63.926	1.00	55.54	BDNA C
ATOM	5156	N6	ADE	102	13.172	-8.385	63.823	1.00	54.30	BDNA N
ATOM	5157	C5	ADE	102	10.939	-9.319	63.803	1.00	55.56	BDNA C
ATOM	5158	N7	ADE	102	11.118	-10.677	63.580	1.00	55.04	BDNA N
ATOM	5159	C8	ADE	102	9.896	-11.155	63.552	1.00	55.53	BDNA C
ATOM	5160	C2'	ADE	102	6.978	-11.505	62.832	1.00	57.00	BDNA C
ATOM	5161	C5'	ADE	102	6.002	-12.709	65.788	1.00	57.74	BDNA C
ATOM	5162	C4'	ADE	102	5.839	-11.481	64.927	1.00	57.18	BDNA C
ATOM	5163	O4'	ADE	102	7.027	-10.656	65.005	1.00	56.60	BDNA O
ATOM	5164	C1'	ADE	102	7.472	-10.362	63.696	1.00	56.39	BDNA C
ATOM	5165	C3'	ADE	102	5.619	-11.783	63.444	1.00	57.16	BDNA C
ATOM	5166	O3'	ADE	102	4.641	-10.888	62.912	1.00	57.52	BDNA O
ATOM	5167	P	ADE	103	4.089	-11.096	61.418	1.00	56.90	BDNA P
ATOM	5168	O1P	ADE	103	2.683	-11.555	61.526	1.00	56.75	BDNA O
ATOM	5169	O2P	ADE	103	5.068	-11.891	60.632	1.00	57.11	BDNA O
ATOM	5170	O5'	ADE	103	4.074	-9.613	60.853	1.00	56.82	BDNA O
ATOM	5171	N9	ADE	103	7.884	-7.896	60.516	1.00	54.82	BDNA N
ATOM	5172	C4	ADE	103	9.165	-7.410	60.630	1.00	52.89	BDNA C
ATOM	5173	N3	ADE	103	9.543	-6.131	60.784	1.00	51.82	BDNA N
ATOM	5174	C2	ADE	103	10.870	-6.037	60.847	1.00	51.55	BDNA C
ATOM	5175	N1	ADE	103	11.793	-7.001	60.773	1.00	52.09	BDNA N
ATOM	5176	C6	ADE	103	11.377	-8.278	60.614	1.00	53.24	BDNA C
ATOM	5177	N6	ADE	103	12.293	-9.248	60.528	1.00	53.75	BDNA N
ATOM	5178	C5	ADE	103	9.994	-8.511	60.542	1.00	53.16	BDNA C
ATOM	5179	N7	ADE	103	9.252	-9.675	60.396	1.00	54.21	BDNA N
ATOM	5180	C8	ADE	103	8.009	-9.257	60.392	1.00	54.81	BDNA C
ATOM	5181	C2'	ADE	103	5.764	-7.390	59.318	1.00	57.76	BDNA C
ATOM	5182	C5'	ADE	103	3.706	-8.536	61.702	1.00	57.38	BDNA C
ATOM	5183	C4'	ADE	103	4.477	-7.295	61.331	1.00	57.78	BDNA C
ATOM	5184	O4'	ADE	103	5.882	-7.465	61.638	1.00	57.39	BDNA O
ATOM	5185	C1'	ADE	103	6.654	-7.106	60.505	1.00	56.39	BDNA C
ATOM	5186	C3'	ADE	103	4.410	-6.959	59.844	1.00	58.75	BDNA C



ATOM	5187	O3'	ADE	103	4.258	-5.558	59.673	1.00	60.18	BDNA	O
ATOM	5188	P	ADE	104	3.874	-4.979	58.230	1.00	61.89	BDNA	P
ATOM	5189	O1P	ADE	104	2.540	-4.332	58.366	1.00	61.45	BDNA	O
ATOM	5190	O2P	ADE	104	4.078	-6.043	57.207	1.00	61.03	BDNA	O
ATOM	5191	O5'	ADE	104	4.970	-3.848	58.007	1.00	60.29	BDNA	O
ATOM	5192	N9	ADE	104	8.935	-4.151	57.329	1.00	52.80	BDNA	N
ATOM	5193	C4	ADE	104	10.260	-4.506	57.431	1.00	51.75	BDNA	C
ATOM	5194	N3	ADE	104	11.295	-3.714	57.759	1.00	51.04	BDNA	N
ATOM	5195	C2	ADE	104	12.431	-4.406	57.768	1.00	50.66	BDNA	C
ATOM	5196	N1	ADE	104	12.640	-5.702	57.506	1.00	50.62	BDNA	N
ATOM	5197	C6	ADE	104	11.583	-6.473	57.178	1.00	50.75	BDNA	C
ATOM	5198	N6	ADE	104	11.796	-7.764	56.913	1.00	49.94	BDNA	N
ATOM	5199	C5	ADE	104	10.314	-5.858	57.134	1.00	51.31	BDNA	C
ATOM	5200	N7	ADE	104	9.048	-6.347	56.842	1.00	51.21	BDNA	N
ATOM	5201	C8	ADE	104	8.269	-5.298	56.967	1.00	52.74	BDNA	C
ATOM	5202	C2'	ADE	104	7.396	-2.336	56.511	1.00	56.97	BDNA	C
ATOM	5203	C5'	ADE	104	5.203	-2.876	59.015	1.00	58.50	BDNA	C
ATOM	5204	C4'	ADE	104	6.434	-2.067	58.688	1.00	58.16	BDNA	C
ATOM	5205	O4'	ADE	104	7.611	-2.906	58.769	1.00	56.71	BDNA	O
ATOM	5206	C1'	ADE	104	8.365	-2.825	57.574	1.00	54.84	BDNA	C
ATOM	5207	C3'	ADE	104	6.447	-1.444	57.295	1.00	57.91	BDNA	C
ATOM	5208	O3'	ADE	104	6.926	-0.101	57.388	1.00	58.36	BDNA	O
ATOM	5209	P	ADE	105	7.271	0.716	56.056	1.00	58.99	BDNA	P
ATOM	5210	O1P	ADE	105	7.114	2.159	56.387	1.00	58.61	BDNA	O
ATOM	5211	O2P	ADE	105	6.513	0.133	54.917	1.00	58.37	BDNA	O
ATOM	5212	O5'	ADE	105	8.817	0.411	55.855	1.00	57.81	BDNA	O
ATOM	5213	N9	ADE	105	11.763	-2.448	54.702	1.00	58.92	BDNA	N
ATOM	5214	C4	ADE	105	12.681	-3.466	54.657	1.00	59.22	BDNA	C
ATOM	5215	N3	ADE	105	13.998	-3.382	54.904	1.00	59.69	BDNA	N
ATOM	5216	C2	ADE	105	14.578	-4.566	54.754	1.00	60.38	BDNA	C
ATOM	5217	N1	ADE	105	14.034	-5.740	54.412	1.00	60.68	BDNA	N
ATOM	5218	C6	ADE	105	12.708	-5.790	54.171	1.00	60.37	BDNA	C
ATOM	5219	N6	ADE	105	12.168	-6.961	53.829	1.00	60.68	BDNA	N
ATOM	5220	C5	ADE	105	11.976	-4.595	54.297	1.00	59.82	BDNA	C
ATOM	5221	N7	ADE	105	10.631	-4.298	54.125	1.00	59.31	BDNA	N
ATOM	5222	C8	ADE	105	10.558	-3.016	54.381	1.00	58.80	BDNA	C
ATOM	5223	C2'	ADE	105	11.397	-0.053	54.097	1.00	59.62	BDNA	C
ATOM	5224	C5'	ADE	105	9.739	0.714	56.892	1.00	58.26	BDNA	C
ATOM	5225	C4'	ADE	105	11.152	0.608	56.378	1.00	58.93	BDNA	C
ATOM	5226	O4'	ADE	105	11.550	-0.780	56.305	1.00	59.05	BDNA	O
ATOM	5227	C1'	ADE	105	12.060	-1.055	55.017	1.00	58.77	BDNA	C
ATOM	5228	C3'	ADE	105	11.333	1.181	54.976	1.00	59.08	BDNA	C
ATOM	5229	O3'	ADE	105	12.549	1.920	54.891	1.00	59.42	BDNA	O
ATOM	5230	P	THY	106	12.603	3.240	53.983	1.00	60.11	BDNA	P
ATOM	5231	O1P	THY	106	12.926	4.397	54.865	1.00	60.21	BDNA	O
ATOM	5232	O2P	THY	106	11.371	3.260	53.153	1.00	60.54	BDNA	O
ATOM	5233	O5'	THY	106	13.825	2.961	53.016	1.00	59.07	BDNA	O
ATOM	5234	N1	THY	106	15.170	-1.999	52.570	1.00	49.60	BDNA	N
ATOM	5235	C6	THY	106	13.882	-1.646	52.238	1.00	48.94	BDNA	C
ATOM	5236	C2	THY	106	15.643	-3.259	52.325	1.00	47.49	BDNA	C
ATOM	5237	O2	THY	106	16.764	-3.619	52.623	1.00	47.71	BDNA	O
ATOM	5238	N3	THY	106	14.745	-4.093	51.712	1.00	46.81	BDNA	N
ATOM	5239	C4	THY	106	13.449	-3.799	51.336	1.00	46.68	BDNA	C
ATOM	5240	O4	THY	106	12.765	-4.645	50.769	1.00	45.32	BDNA	O
ATOM	5241	C5	THY	106	13.011	-2.471	51.649	1.00	47.45	BDNA	C
ATOM	5242	C5A	THY	106	11.611	-2.071	51.313	1.00	47.59	BDNA	C
ATOM	5243	C2'	THY	106	16.806	-0.152	52.161	1.00	55.02	BDNA	C
ATOM	5244	C5'	THY	106	14.168	1.628	52.722	1.00	57.64	BDNA	C
ATOM	5245	C4'	THY	106	15.398	1.240	53.498	1.00	55.88	BDNA	C
ATOM	5246	O4'	THY	106	15.249	-0.122	53.947	1.00	54.97	BDNA	O
ATOM	5247	C1'	THY	106	16.067	-1.002	53.191	1.00	52.84	BDNA	C
ATOM	5248	C3'	THY	106	16.652	1.279	52.642	1.00	56.01	BDNA	C
ATOM	5249	O3'	THY	106	17.778	1.733	53.380	1.00	57.10	BDNA	O

ATOM	5250	P	URI	107	19.163	1.974	52.612	1.00	59.52	BDNA P
ATOM	5251	O1P	URI	107	20.094	2.708	53.510	1.00	60.18	BDNA O
ATOM	5252	O2P	URI	107	18.860	2.518	51.262	1.00	58.23	BDNA O
ATOM	5253	O5'	URI	107	19.719	0.499	52.446	1.00	57.89	BDNA O
ATOM	5254	N1	URI	107	18.817	-3.230	49.986	1.00	55.92	BDNA N
ATOM	5255	C6	URI	107	18.047	-2.152	49.620	1.00	55.50	BDNA C
ATOM	5256	C2	URI	107	18.358	-4.522	49.810	1.00	56.18	BDNA C
ATOM	5257	O2	URI	107	19.010	-5.509	50.111	1.00	55.42	BDNA O
ATOM	5258	N3	URI	107	17.103	-4.617	49.266	1.00	55.68	BDNA N
ATOM	5259	C4	URI	107	16.280	-3.579	48.891	1.00	55.15	BDNA C
ATOM	5260	O4	URI	107	15.157	-3.827	48.463	1.00	55.72	BDNA O
ATOM	5261	C5	URI	107	16.827	-2.279	49.094	1.00	54.47	BDNA C
ATOM	5262	C2'	URI	107	21.161	-2.464	49.614	1.00	57.02	BDNA C
ATOM	5263	C5'	URI	107	20.704	0.205	51.484	1.00	57.62	BDNA C
ATOM	5264	C4'	URI	107	21.168	-1.218	51.653	1.00	57.48	BDNA C
ATOM	5265	O4'	URI	107	20.027	-2.109	51.637	1.00	56.57	BDNA O
ATOM	5266	C1'	URI	107	20.149	-3.046	50.578	1.00	56.28	BDNA C
ATOM	5267	C3'	URI	107	22.080	-1.675	50.526	1.00	57.76	BDNA C
ATOM	5268	O3'	URI	107	23.129	-2.479	51.043	1.00	59.13	BDNA O
ATOM	5269	P	URI	108	24.385	-2.806	50.113	1.00	61.31	BDNA P
ATOM	5270	O1P	URI	108	25.505	-3.242	50.991	1.00	60.20	BDNA O
ATOM	5271	O2P	URI	108	24.571	-1.651	49.193	1.00	60.87	BDNA O
ATOM	5272	O5'	URI	108	23.868	-4.043	49.251	1.00	62.04	BDNA O
ATOM	5273	N1	URI	108	20.415	-5.142	46.606	1.00	58.63	BDNA N
ATOM	5274	C6	URI	108	20.506	-3.768	46.609	1.00	58.28	BDNA C
ATOM	5275	C2	URI	108	19.254	-5.778	46.217	1.00	57.82	BDNA C
ATOM	5276	O2	URI	108	19.143	-6.992	46.192	1.00	56.26	BDNA O
ATOM	5277	N3	URI	108	18.229	-4.940	45.857	1.00	57.20	BDNA N
ATOM	5278	C4	URI	108	18.248	-3.564	45.842	1.00	56.99	BDNA C
ATOM	5279	O4	URI	108	17.241	-2.955	45.488	1.00	56.07	BDNA O
ATOM	5280	C5	URI	108	19.487	-2.978	46.251	1.00	57.19	BDNA C
ATOM	5281	C2'	URI	108	22.911	-5.557	46.562	1.00	59.96	BDNA C
ATOM	5282	C5'	URI	108	23.417	-5.242	49.887	1.00	60.87	BDNA C
ATOM	5283	C4'	URI	108	22.958	-6.246	48.854	1.00	59.99	BDNA C
ATOM	5284	O4'	URI	108	21.596	-5.990	48.436	1.00	60.46	BDNA O
ATOM	5285	C1'	URI	108	21.537	-5.995	47.019	1.00	59.62	BDNA C
ATOM	5286	C3'	URI	108	23.794	-6.268	47.575	1.00	60.19	BDNA C
ATOM	5287	O3'	URI	108	24.014	-7.612	47.167	1.00	58.48	BDNA O
ATOM	5288	P	URI	109	25.489	-8.071	46.763	1.00	58.43	BDNA P
ATOM	5289	O1P	URI	109	26.233	-8.312	48.019	1.00	59.16	BDNA O
ATOM	5290	O2P	URI	109	26.004	-7.092	45.775	1.00	57.63	BDNA O
ATOM	5291	O5'	URI	109	25.274	-9.476	46.054	1.00	57.90	BDNA O
ATOM	5292	N1	URI	109	21.032	-8.138	43.408	1.00	51.96	BDNA N
ATOM	5293	C6	URI	109	21.822	-7.026	43.608	1.00	51.93	BDNA C
ATOM	5294	C2	URI	109	19.752	-8.015	42.913	1.00	51.03	BDNA C
ATOM	5295	O2	URI	109	19.019	-8.968	42.727	1.00	49.97	BDNA O
ATOM	5296	N3	URI	109	19.357	-6.729	42.644	1.00	51.77	BDNA N
ATOM	5297	C4	URI	109	20.091	-5.576	42.819	1.00	51.15	BDNA C
ATOM	5298	O4	URI	109	19.579	-4.488	42.548	1.00	51.19	BDNA O
ATOM	5299	C5	URI	109	21.406	-5.783	43.338	1.00	50.56	BDNA C
ATOM	5300	C2'	URI	109	22.342	-10.091	42.583	1.00	53.23	BDNA C
ATOM	5301	C5'	URI	109	24.808	-9.557	44.709	1.00	56.77	BDNA C
ATOM	5302	C4'	URI	109	23.508	-10.326	44.655	1.00	54.87	BDNA C
ATOM	5303	O4'	URI	109	22.389	-9.419	44.826	1.00	54.44	BDNA O
ATOM	5304	C1'	URI	109	21.520	-9.493	43.703	1.00	52.92	BDNA C
ATOM	5305	C3'	URI	109	23.269	-11.030	43.324	1.00	53.37	BDNA C
ATOM	5306	O3'	URI	109	22.637	-12.284	43.563	1.00	52.02	BDNA O
ATOM	5307	P	URI	110	22.954	-13.522	42.598	1.00	51.37	BDNA P
ATOM	5308	O1P	URI	110	22.986	-14.734	43.452	1.00	49.91	BDNA O
ATOM	5309	O2P	URI	110	24.146	-13.164	41.786	1.00	50.49	BDNA O
ATOM	5310	O5'	URI	110	21.676	-13.583	41.642	1.00	49.37	BDNA O
ATOM	5311	N1	URI	110	19.613	-10.248	39.638	1.00	38.68	BDNA N
ATOM	5312	C6	URI	110	20.962	-9.987	39.682	1.00	38.80	BDNA C

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ATOM	5313	C2	URI	110	18.697	-9.213	39.498	1.00	38.07	BDNA C
ATOM	5314	O2	URI	110	17.488	-9.390	39.451	1.00	37.09	BDNA O
ATOM	5315	N3	URI	110	19.252	-7.958	39.406	1.00	37.31	BDNA N
ATOM	5316	C4	URI	110	20.592	-7.635	39.436	1.00	35.32	BDNA C
ATOM	5317	O4	URI	110	20.934	-6.463	39.316	1.00	31.61	BDNA O
ATOM	5318	C5	URI	110	21.468	-8.749	39.586	1.00	36.55	BDNA C
ATOM	5319	C2'	URI	110	19.953	-12.659	39.010	1.00	41.34	BDNA C
ATOM	5320	C5'	URI	110	20.368	-13.810	42.180	1.00	46.08	BDNA C
ATOM	5321	C4'	URI	110	19.302	-13.457	41.166	1.00	43.71	BDNA C
ATOM	5322	O4'	URI	110	19.102	-12.023	41.083	1.00	42.35	BDNA O
ATOM	5323	C1'	URI	110	19.102	-11.625	39.722	1.00	40.44	BDNA C
ATOM	5324	C3'	URI	110	19.569	-13.934	39.738	1.00	41.32	BDNA C
ATOM	5325	O3'	URI	110	18.370	-14.461	39.172	1.00	39.25	BDNA O
ATOM	5326	P	CYT	111	18.452	-15.538	37.982	1.00	37.31	BDNA P
ATOM	5327	O1P	CYT	111	19.845	-15.585	37.462	1.00	35.10	BDNA O
ATOM	5328	O2P	CYT	111	17.780	-16.784	38.432	1.00	37.81	BDNA O
ATOM	5329	O5'	CYT	111	17.539	-14.887	36.866	1.00	35.14	BDNA O
ATOM	5330	N1	CYT	111	17.109	-10.190	35.505	1.00	27.76	BDNA N
ATOM	5331	C6	CYT	111	18.366	-10.717	35.437	1.00	28.17	BDNA C
ATOM	5332	C2	CYT	111	16.923	-8.825	35.550	1.00	27.96	BDNA C
ATOM	5333	O2	CYT	111	15.768	-8.389	35.571	1.00	30.49	BDNA O
ATOM	5334	N3	CYT	111	17.995	-8.010	35.577	1.00	27.49	BDNA N
ATOM	5335	C4	CYT	111	19.220	-8.524	35.546	1.00	27.26	BDNA C
ATOM	5336	N4	CYT	111	20.252	-7.682	35.593	1.00	26.55	BDNA N
ATOM	5337	C5	CYT	111	19.443	-9.926	35.466	1.00	28.51	BDNA C
ATOM	5338	C2'	CYT	111	15.917	-12.176	34.528	1.00	26.54	BDNA C
ATOM	5339	C5'	CYT	111	17.425	-13.483	36.804	1.00	30.67	BDNA C
ATOM	5340	C4'	CYT	111	15.979	-13.081	36.696	1.00	26.57	BDNA C
ATOM	5341	O4'	CYT	111	15.942	-11.659	36.838	1.00	27.63	BDNA O
ATOM	5342	C1'	CYT	111	15.932	-11.054	35.559	1.00	27.06	BDNA C
ATOM	5343	C3'	CYT	111	15.385	-13.347	35.325	1.00	25.90	BDNA C
ATOM	5344	O3'	CYT	111	13.952	-13.329	35.440	1.00	25.63	BDNA O
ATOM	5345	P	CYT	112	13.037	-13.787	34.197	1.00	25.13	BDNA P
ATOM	5346	O1P	CYT	112	11.695	-14.219	34.669	1.00	23.60	BDNA O
ATOM	5347	O2P	CYT	112	13.856	-14.704	33.348	1.00	21.35	BDNA O
ATOM	5348	O5'	CYT	112	12.826	-12.430	33.411	1.00	22.50	BDNA O
ATOM	5349	N1	CYT	112	16.543	-9.346	31.602	1.00	17.09	BDNA N
ATOM	5350	C6	CYT	112	17.260	-10.510	31.625	1.00	13.37	BDNA C
ATOM	5351	C2	CYT	112	17.184	-8.113	31.901	1.00	18.04	BDNA C
ATOM	5352	O2	CYT	112	16.506	-7.073	31.937	1.00	21.15	BDNA O
ATOM	5353	N3	CYT	112	18.520	-8.092	32.130	1.00	14.03	BDNA N
ATOM	5354	C4	CYT	112	19.210	-9.228	32.094	1.00	15.20	BDNA C
ATOM	5355	N4	CYT	112	20.524	-9.157	32.270	1.00	12.67	BDNA N
ATOM	5356	C5	CYT	112	18.581	-10.496	31.866	1.00	13.39	BDNA C
ATOM	5357	C2'	CYT	112	14.852	-10.190	29.981	1.00	18.26	BDNA C
ATOM	5358	C5'	CYT	112	13.513	-12.218	32.205	1.00	21.18	BDNA C
ATOM	5359	C4'	CYT	112	13.304	-10.807	31.727	1.00	18.27	BDNA C
ATOM	5360	O4'	CYT	112	14.357	-9.967	32.270	1.00	18.76	BDNA O
ATOM	5361	C1'	CYT	112	15.107	-9.344	31.228	1.00	18.16	BDNA C
ATOM	5362	C3'	CYT	112	13.462	-10.759	30.212	1.00	16.96	BDNA C
ATOM	5363	O3'	CYT	112	12.439	-9.965	29.623	1.00	14.84	BDNA O
ATOM	5364	P	ADE	113	11.794	-10.436	28.245	1.00	13.47	BDNA P
ATOM	5365	O1P	ADE	113	10.332	-10.605	28.447	1.00	13.04	BDNA O
ATOM	5366	O2P	ADE	113	12.602	-11.569	27.725	1.00	15.49	BDNA O
ATOM	5367	O5'	ADE	113	12.095	-9.223	27.283	1.00	10.07	BDNA O
ATOM	5368	N9	ADE	113	16.670	-6.768	25.124	1.00	3.45	BDNA N
ATOM	5369	C4	ADE	113	17.706	-5.875	25.279	1.00	2.77	BDNA C
ATOM	5370	N3	ADE	113	17.626	-4.567	25.590	1.00	1.51	BDNA N
ATOM	5371	C2	ADE	113	18.840	-4.023	25.635	1.00	1.00	BDNA C
ATOM	5372	N1	ADE	113	20.028	-4.589	25.430	1.00	1.00	BDNA N
ATOM	5373	C6	ADE	113	20.071	-5.899	25.123	1.00	1.00	BDNA C
ATOM	5374	N6	ADE	113	21.253	-6.468	24.916	1.00	1.00	BDNA N
ATOM	5375	C5	ADE	113	18.860	-6.594	25.036	1.00	2.98	BDNA C

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ATOM	5376	N7	ADE	113	18.560	-7.915	24.726	1.00	4.61	BDNA N
ATOM	5377	C8	ADE	113	17.252	-7.964	24.791	1.00	3.30	BDNA C
ATOM	5378	C2'	ADE	113	14.319	-7.138	24.286	1.00	4.49	BDNA C
ATOM	5379	C5'	ADE	113	13.435	-8.914	26.954	1.00	6.16	BDNA C
ATOM	5380	C4'	ADE	113	13.517	-7.486	26.493	1.00	4.94	BDNA C
ATOM	5381	O4'	ADE	113	14.876	-7.010	26.544	1.00	3.65	BDNA O
ATOM	5382	C1'	ADE	113	15.250	-6.482	25.295	1.00	4.40	BDNA C
ATOM	5383	C3'	ADE	113	13.027	-7.256	25.072	1.00	4.32	BDNA C
ATOM	5384	O3'	ADE	113	12.283	-6.038	25.063	1.00	6.99	BDNA O
ATOM	5385	P	ADE	114	11.491	-5.588	23.749	1.00	8.12	BDNA P
ATOM	5386	O1P	ADE	114	10.214	-5.018	24.217	1.00	6.12	BDNA O
ATOM	5387	O2P	ADE	114	11.496	-6.653	22.718	1.00	9.62	BDNA O
ATOM	5388	O5'	ADE	114	12.377	-4.401	23.204	1.00	5.10	BDNA O
ATOM	5389	N9	ADE	114	16.642	-4.313	22.196	1.00	1.00	BDNA N
ATOM	5390	C4	ADE	114	17.993	-4.082	22.225	1.00	1.81	BDNA C
ATOM	5391	N3	ADE	114	18.604	-2.892	22.320	1.00	1.00	BDNA N
ATOM	5392	C2	ADE	114	19.908	-3.049	22.316	1.00	1.00	BDNA C
ATOM	5393	N1	ADE	114	20.619	-4.172	22.236	1.00	2.15	BDNA N
ATOM	5394	C6	ADE	114	19.978	-5.344	22.151	1.00	1.00	BDNA C
ATOM	5395	N6	ADE	114	20.703	-6.447	22.091	1.00	1.00	BDNA N
ATOM	5396	C5	ADE	114	18.596	-5.322	22.141	1.00	1.00	BDNA C
ATOM	5397	N7	ADE	114	17.644	-6.325	22.080	1.00	1.00	BDNA N
ATOM	5398	C8	ADE	114	16.499	-5.674	22.125	1.00	1.78	BDNA C
ATOM	5399	C2'	ADE	114	14.478	-3.363	21.279	1.00	1.00	BDNA C
ATOM	5400	C5'	ADE	114	12.717	-3.315	24.052	1.00	3.77	BDNA C
ATOM	5401	C4'	ADE	114	13.803	-2.504	23.398	1.00	4.17	BDNA C
ATOM	5402	O4'	ADE	114	15.065	-3.204	23.501	1.00	6.91	BDNA O
ATOM	5403	C1'	ADE	114	15.645	-3.250	22.219	1.00	1.00	BDNA C
ATOM	5404	C3'	ADE	114	13.562	-2.327	21.900	1.00	2.78	BDNA C
ATOM	5405	O3'	ADE	114	14.032	-1.051	21.524	1.00	3.84	BDNA O
ATOM	5406	P	GUA	115	13.082	-0.047	20.727	1.00	5.48	BDNA P
ATOM	5407	O1P	GUA	115	12.070	0.438	21.691	1.00	4.89	BDNA O
ATOM	5408	O2P	GUA	115	12.646	-0.701	19.472	1.00	2.61	BDNA O
ATOM	5409	O5'	GUA	115	14.118	1.089	20.348	1.00	1.00	BDNA O
ATOM	5410	N9	GUA	115	18.595	-1.283	19.486	1.00	2.75	BDNA N
ATOM	5411	C4	GUA	115	19.770	-1.966	19.311	1.00	1.00	BDNA C
ATOM	5412	N3	GUA	115	20.999	-1.441	19.389	1.00	3.22	BDNA N
ATOM	5413	C2	GUA	115	21.934	-2.334	19.143	1.00	3.48	BDNA C
ATOM	5414	N2	GUA	115	23.228	-1.978	19.144	1.00	5.54	BDNA N
ATOM	5415	N1	GUA	115	21.680	-3.636	18.864	1.00	2.83	BDNA N
ATOM	5416	C6	GUA	115	20.426	-4.200	18.772	1.00	1.00	BDNA C
ATOM	5417	O6	GUA	115	20.327	-5.386	18.487	1.00	1.00	BDNA O
ATOM	5418	C5	GUA	115	19.408	-3.257	19.022	1.00	1.00	BDNA C
ATOM	5419	N7	GUA	115	18.026	-3.394	19.018	1.00	2.08	BDNA N
ATOM	5420	C8	GUA	115	17.585	-2.198	19.304	1.00	1.85	BDNA C
ATOM	5421	C2'	GUA	115	18.384	0.843	18.430	1.00	5.36	BDNA C
ATOM	5422	C5'	GUA	115	15.126	0.797	19.395	1.00	1.00	BDNA C
ATOM	5423	C4'	GUA	115	16.448	1.409	19.787	1.00	1.69	BDNA C
ATOM	5424	O4'	GUA	115	17.235	0.371	20.431	1.00	1.00	BDNA O
ATOM	5425	C1'	GUA	115	18.468	0.145	19.761	1.00	2.23	BDNA C
ATOM	5426	C3'	GUA	115	17.200	1.780	18.514	1.00	4.71	BDNA C
ATOM	5427	O3'	GUA	115	17.620	3.123	18.392	1.00	6.64	BDNA O
ATOM	5428	P	THY	116	17.976	3.664	16.926	1.00	12.38	BDNA P
ATOM	5429	O1P	THY	116	17.782	5.139	16.858	1.00	11.92	BDNA O
ATOM	5430	O2P	THY	116	17.232	2.782	15.992	1.00	11.07	BDNA O
ATOM	5431	O5'	THY	116	19.521	3.310	16.754	1.00	8.88	BDNA O
ATOM	5432	N1	THY	116	21.987	0.113	16.012	1.00	3.53	BDNA N
ATOM	5433	C6	THY	116	20.616	-0.025	15.957	1.00	2.44	BDNA C
ATOM	5434	C2	THY	116	22.818	-0.981	15.935	1.00	2.05	BDNA C
ATOM	5435	O2	THY	116	24.028	-0.901	15.944	1.00	1.00	BDNA O
ATOM	5436	N3	THY	116	22.166	-2.187	15.842	1.00	1.76	BDNA N
ATOM	5437	C4	THY	116	20.796	-2.398	15.810	1.00	1.49	BDNA C
ATOM	5438	O4	THY	116	20.351	-3.543	15.749	1.00	1.00	BDNA O

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ATOM	5439	C5	THY	116	19.991	-1.203	15.864	1.00	1.00	BDNA	C
ATOM	5440	C5A	THY	116	18.506	-1.328	15.825	1.00	1.00	BDNA	C
ATOM	5441	C2'	THY	116	22.244	2.440	15.099	1.00	5.62	BDNA	C
ATOM	5442	C5'	THY	116	20.481	3.808	17.678	1.00	7.80	BDNA	C
ATOM	5443	C4'	THY	116	21.877	3.414	17.260	1.00	6.61	BDNA	C
ATOM	5444	O4'	THY	116	22.026	1.984	17.369	1.00	5.46	BDNA	O
ATOM	5445	C1'	THY	116	22.578	1.445	16.186	1.00	2.99	BDNA	C
ATOM	5446	C3'	THY	116	22.277	3.772	15.832	1.00	8.03	BDNA	C
ATOM	5447	O3'	THY	116	23.598	4.319	15.835	1.00	11.66	BDNA	O
ATOM	5448	P	CYT	117	24.119	5.152	14.562	1.00	15.39	BDNA	P
ATOM	5449	O1P	CYT	117	24.967	6.268	15.052	1.00	12.97	BDNA	O
ATOM	5450	O2P	CYT	117	22.975	5.439	13.652	1.00	13.94	BDNA	O
ATOM	5451	O5'	CYT	117	25.065	4.117	13.827	1.00	12.47	BDNA	O
ATOM	5452	N1	CYT	117	23.880	-0.167	12.477	1.00	4.24	BDNA	N
ATOM	5453	C6	CYT	117	22.730	0.556	12.473	1.00	1.00	BDNA	C
ATOM	5454	C2	CYT	117	23.822	-1.599	12.454	1.00	4.73	BDNA	C
ATOM	5455	O2	CYT	117	24.873	-2.273	12.423	1.00	5.93	BDNA	O
ATOM	5456	N3	CYT	117	22.621	-2.201	12.467	1.00	2.22	BDNA	N
ATOM	5457	C4	CYT	117	21.513	-1.472	12.509	1.00	1.21	BDNA	C
ATOM	5458	N4	CYT	117	20.355	-2.117	12.545	1.00	1.00	BDNA	N
ATOM	5459	C5	CYT	117	21.541	-0.048	12.517	1.00	2.19	BDNA	C
ATOM	5460	C2'	CYT	117	25.460	1.687	11.584	1.00	11.53	BDNA	C
ATOM	5461	C5'	CYT	117	25.961	3.329	14.570	1.00	11.75	BDNA	C
ATOM	5462	C4'	CYT	117	26.362	2.124	13.762	1.00	12.73	BDNA	C
ATOM	5463	O4'	CYT	117	25.358	1.080	13.822	1.00	13.22	BDNA	O
ATOM	5464	C1'	CYT	117	25.200	0.517	12.529	1.00	10.27	BDNA	C
ATOM	5465	C3'	CYT	117	26.625	2.390	12.280	1.00	12.72	BDNA	C
ATOM	5466	O3'	CYT	117	27.862	1.747	11.987	1.00	17.29	BDNA	O
ATOM	5467	P	THY	118	28.687	2.109	10.661	1.00	19.20	BDNA	P
ATOM	5468	O1P	THY	118	29.968	2.700	11.131	1.00	17.39	BDNA	O
ATOM	5469	O2P	THY	118	27.841	2.862	9.700	1.00	18.31	BDNA	O
ATOM	5470	O5'	THY	118	28.995	0.651	10.092	1.00	14.61	BDNA	O
ATOM	5471	N1	THY	118	26.011	-2.533	8.983	1.00	6.13	BDNA	N
ATOM	5472	C6	THY	118	25.467	-1.270	8.990	1.00	3.83	BDNA	C
ATOM	5473	C2	THY	118	25.216	-3.650	8.848	1.00	6.85	BDNA	C
ATOM	5474	O2	THY	118	25.665	-4.789	8.753	1.00	6.82	BDNA	O
ATOM	5475	N3	THY	118	23.864	-3.384	8.816	1.00	5.07	BDNA	N
ATOM	5476	C4	THY	118	23.260	-2.143	8.882	1.00	4.58	BDNA	C
ATOM	5477	O4	THY	118	22.041	-2.050	8.904	1.00	5.00	BDNA	O
ATOM	5478	C5	THY	118	24.153	-1.029	8.944	1.00	3.21	BDNA	C
ATOM	5479	C5A	THY	118	23.574	0.343	8.961	1.00	4.58	BDNA	C
ATOM	5480	C2'	THY	118	28.367	-2.033	8.169	1.00	12.10	BDNA	C
ATOM	5481	C5'	THY	118	29.382	-0.380	10.997	1.00	13.42	BDNA	C
ATOM	5482	C4'	THY	118	29.194	-1.752	10.393	1.00	12.61	BDNA	C
ATOM	5483	O4'	THY	118	27.817	-2.197	10.430	1.00	12.05	BDNA	O
ATOM	5484	C1'	THY	118	27.462	-2.734	9.165	1.00	9.67	BDNA	C
ATOM	5485	C3'	THY	118	29.662	-1.915	8.954	1.00	12.72	BDNA	C
ATOM	5486	O3'	THY	118	30.403	-3.121	8.860	1.00	15.40	BDNA	O
ATOM	5487	P	THY	119	31.371	-3.352	7.612	1.00	21.94	BDNA	P
ATOM	5488	O1P	THY	119	32.754	-3.564	8.102	1.00	18.61	BDNA	O
ATOM	5489	O2P	THY	119	31.088	-2.262	6.631	1.00	19.98	BDNA	O
ATOM	5490	O5'	THY	119	30.844	-4.734	7.045	1.00	19.21	BDNA	O
ATOM	5491	N1	THY	119	26.542	-5.409	5.756	1.00	16.59	BDNA	N
ATOM	5492	C6	THY	119	26.809	-4.060	5.664	1.00	15.12	BDNA	C
ATOM	5493	C2	THY	119	25.239	-5.886	5.667	1.00	16.54	BDNA	C
ATOM	5494	O2	THY	119	24.952	-7.075	5.692	1.00	15.39	BDNA	O
ATOM	5495	N3	THY	119	24.276	-4.915	5.541	1.00	15.85	BDNA	N
ATOM	5496	C4	THY	119	24.467	-3.552	5.485	1.00	16.60	BDNA	C
ATOM	5497	O4	THY	119	23.490	-2.796	5.427	1.00	16.50	BDNA	O
ATOM	5498	C5	THY	119	25.850	-3.122	5.523	1.00	15.67	BDNA	C
ATOM	5499	C5A	THY	119	26.147	-1.661	5.396	1.00	13.66	BDNA	C
ATOM	5500	C2'	THY	119	28.798	-6.376	5.024	1.00	19.39	BDNA	C
ATOM	5501	C5'	THY	119	30.497	-5.775	7.937	1.00	18.43	BDNA	C

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ATOM	5502	C4'	THY	119	29.523	-6.719	7.280	1.00	20.07	BDNA	C
ATOM	5503	O4'	THY	119	28.178	-6.178	7.248	1.00	19.43	BDNA	O
ATOM	5504	C1'	THY	119	27.621	-6.404	5.972	1.00	17.34	BDNA	C
ATOM	5505	C3'	THY	119	29.875	-7.076	5.842	1.00	20.92	BDNA	C
ATOM	5506	O3'	THY	119	29.802	-8.490	5.714	1.00	25.17	BDNA	O
ATOM	5507	P	THY	120	30.295	-9.202	4.366	1.00	29.40	BDNA	P
ATOM	5508	O1P	THY	120	31.392	-10.150	4.701	1.00	27.76	BDNA	O
ATOM	5509	O2P	THY	120	30.499	-8.157	3.316	1.00	28.27	BDNA	O
ATOM	5510	O5'	THY	120	29.025	-10.057	3.972	1.00	28.16	BDNA	O
ATOM	5511	N1	THY	120	24.662	-8.507	2.855	1.00	27.04	BDNA	N
ATOM	5512	C6	THY	120	25.784	-7.744	2.613	1.00	27.20	BDNA	C
ATOM	5513	C2	THY	120	23.406	-7.951	2.842	1.00	26.60	BDNA	C
ATOM	5514	O2	THY	120	22.389	-8.593	3.048	1.00	25.55	BDNA	O
ATOM	5515	N3	THY	120	23.382	-6.601	2.588	1.00	27.03	BDNA	N
ATOM	5516	C4	THY	120	24.465	-5.768	2.362	1.00	27.21	BDNA	C
ATOM	5517	O4	THY	120	24.288	-4.560	2.176	1.00	26.48	BDNA	O
ATOM	5518	C5	THY	120	25.752	-6.423	2.378	1.00	26.97	BDNA	C
ATOM	5519	C5A	THY	120	26.982	-5.607	2.141	1.00	23.68	BDNA	C
ATOM	5520	C2'	THY	120	25.661	-10.711	2.163	1.00	29.54	BDNA	C
ATOM	5521	C5'	THY	120	27.741	-9.517	4.186	1.00	28.59	BDNA	C
ATOM	5522	C4'	THY	120	26.738	-10.630	4.291	1.00	29.59	BDNA	C
ATOM	5523	O4'	THY	120	25.437	-10.031	4.424	1.00	30.46	BDNA	O
ATOM	5524	C1'	THY	120	24.797	-9.944	3.161	1.00	28.89	BDNA	C
ATOM	5525	C3'	THY	120	26.678	-11.453	3.015	1.00	30.91	BDNA	C
ATOM	5526	O3'	THY	120	26.331	-12.802	3.343	1.00	33.31	BDNA	O
ATOM	5527	P	THY	121	25.827	-13.800	2.200	1.00	32.90	BDNA	P
ATOM	5528	O1P	THY	121	26.026	-15.192	2.681	1.00	31.86	BDNA	O
ATOM	5529	O2P	THY	121	26.443	-13.363	0.913	1.00	33.18	BDNA	O
ATOM	5530	O5'	THY	121	24.268	-13.511	2.160	1.00	31.21	BDNA	O
ATOM	5531	N1	THY	121	22.146	-9.720	-0.103	1.00	23.90	BDNA	N
ATOM	5532	C6	THY	121	23.504	-9.672	-0.352	1.00	21.72	BDNA	C
ATOM	5533	C2	THY	121	21.361	-8.597	-0.204	1.00	22.88	BDNA	C
ATOM	5534	O2	THY	121	20.155	-8.615	-0.023	1.00	21.28	BDNA	O
ATOM	5535	N3	THY	121	22.044	-7.447	-0.533	1.00	22.06	BDNA	N
ATOM	5536	C4	THY	121	23.402	-7.322	-0.774	1.00	21.53	BDNA	C
ATOM	5537	O4	THY	121	23.881	-6.220	-1.037	1.00	22.62	BDNA	O
ATOM	5538	C5	THY	121	24.160	-8.549	-0.682	1.00	19.97	BDNA	C
ATOM	5539	C5A	THY	121	25.627	-8.514	-0.965	1.00	15.64	BDNA	C
ATOM	5540	C2'	THY	121	21.331	-11.939	-0.850	1.00	32.26	BDNA	C
ATOM	5541	C5'	THY	121	23.544	-13.695	0.973	1.00	31.43	BDNA	C
ATOM	5542	C4'	THY	121	22.182	-13.066	1.100	1.00	31.99	BDNA	C
ATOM	5543	O4'	THY	121	22.305	-11.629	1.244	1.00	31.03	BDNA	O
ATOM	5544	C1'	THY	121	21.484	-10.971	0.291	1.00	27.39	BDNA	C
ATOM	5545	C3'	THY	121	21.353	-13.289	-0.156	1.00	33.72	BDNA	C
ATOM	5546	O3'	THY	121	20.049	-13.732	0.170	1.00	35.63	BDNA	O
ATOM	5547	P	THY	122	19.327	-14.760	-0.809	1.00	37.65	BDNA	P
ATOM	5548	O1P	THY	122	18.541	-15.711	0.029	1.00	37.81	BDNA	O
ATOM	5549	O2P	THY	122	20.375	-15.290	-1.727	1.00	35.23	BDNA	O
ATOM	5550	O5'	THY	122	18.333	-13.808	-1.617	1.00	35.38	BDNA	O
ATOM	5551	N1	THY	122	18.959	-9.723	-3.202	1.00	16.81	BDNA	N
ATOM	5552	C6	THY	122	20.152	-10.400	-3.291	1.00	14.65	BDNA	C
ATOM	5553	C2	THY	122	18.910	-8.354	-3.274	1.00	13.69	BDNA	C
ATOM	5554	O2	THY	122	17.874	-7.723	-3.209	1.00	14.11	BDNA	O
ATOM	5555	N3	THY	122	20.121	-7.747	-3.430	1.00	12.72	BDNA	N
ATOM	5556	C4	THY	122	21.351	-8.357	-3.531	1.00	13.48	BDNA	C
ATOM	5557	O4	THY	122	22.357	-7.678	-3.680	1.00	15.88	BDNA	O
ATOM	5558	C5	THY	122	21.334	-9.792	-3.455	1.00	12.64	BDNA	C
ATOM	5559	C5A	THY	122	22.626	-10.533	-3.571	1.00	10.44	BDNA	C
ATOM	5560	C2'	THY	122	17.383	-11.585	-3.950	1.00	28.60	BDNA	C
ATOM	5561	C5'	THY	122	17.197	-13.254	-0.963	1.00	32.28	BDNA	C
ATOM	5562	C4'	THY	122	16.672	-12.051	-1.712	1.00	31.35	BDNA	C
ATOM	5563	O4'	THY	122	17.662	-10.993	-1.724	1.00	29.05	BDNA	O
ATOM	5564	C1'	THY	122	17.683	-10.427	-3.021	1.00	23.79	BDNA	C

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ATOM	5565	C3'	THY	122	16.258	-12.257	-3.175	1.00	31.15	BDNA	C
ATOM	5566	O3'	THY	122	15.068	-11.472	-3.405	1.00	30.76	BDNA	O
TER	5567		THY	122						BDNA	
ATOM	5568	C1	AG2	990	19.355	-11.256	28.420	1.00	32.11	AG2	C
ATOM	5569	C2	AG2	990	18.073	-11.776	28.139	1.00	35.26	AG2	C
ATOM	5570	C3	AG2	990	16.989	-10.883	28.005	1.00	34.41	AG2	C
ATOM	5571	C4	AG2	990	17.168	-9.529	28.135	1.00	30.78	AG2	C
ATOM	5572	C5	AG2	990	18.419	-8.979	28.404	1.00	27.96	AG2	C
ATOM	5573	C6	AG2	990	19.568	-9.839	28.562	1.00	29.12	AG2	C
ATOM	5574	C7	AG2	990	20.887	-9.198	28.843	1.00	27.54	AG2	C
ATOM	5575	C8	AG2	990	20.920	-7.845	28.902	1.00	26.05	AG2	C
ATOM	5576	C9	AG2	990	19.744	-7.036	28.737	1.00	25.45	AG2	C
ATOM	5577	N10	AG2	990	18.537	-7.629	28.501	1.00	26.85	AG2	N
ATOM	5578	C11	AG2	990	22.025	-6.900	29.111	1.00	23.02	AG2	C
ATOM	5579	N12	AG2	990	21.492	-5.583	29.070	1.00	23.92	AG2	N
ATOM	5580	C13	AG2	990	20.151	-5.606	28.866	1.00	24.22	AG2	C
ATOM	5581	C14	AG2	990	22.190	-4.447	29.211	1.00	24.57	AG2	C
ATOM	5582	C15	AG2	990	21.561	-3.238	29.151	1.00	25.27	AG2	C
ATOM	5583	C16	AG2	990	20.168	-3.206	28.963	1.00	25.46	AG2	C
ATOM	5584	C17	AG2	990	19.464	-4.421	28.812	1.00	23.64	AG2	C
ATOM	5585	O18	AG2	990	23.139	-4.489	29.346	1.00	23.75	AG2	O
ATOM	5586	C19	AG2	990	22.823	-2.166	29.337	1.00	28.18	AG2	C
ATOM	5587	C20	AG2	990	21.346	-0.248	29.603	1.00	31.83	AG2	C
ATOM	5588	C21	AG2	990	19.650	-1.902	28.923	1.00	27.04	AG2	C
ATOM	5589	O22	AG2	990	22.726	-0.933	29.615	1.00	30.55	AG2	O
ATOM	5590	O23	AG2	990	21.153	0.834	29.965	1.00	33.03	AG2	O
ATOM	5591	O24	AG2	990	18.853	-1.967	27.826	1.00	31.24	AG2	O
ATOM	5592	C25	AG2	990	18.560	-1.680	30.050	1.00	27.57	AG2	C
ATOM	5593	N26	AG2	990	17.966	-12.736	28.051	1.00	35.84	AG2	O
ATOM	5594	C27	AG2	990	22.213	-9.964	29.107	1.00	27.97	AG2	C
ATOM	5595	C28	AG2	990	23.307	-9.230	28.276	1.00	28.19	AG2	N
ATOM	5596	C29	AG2	990	20.295	-0.879	29.289	1.00	28.00	AG2	C
ATOM	5597	C30	AG2	990	24.288	-10.245	27.766	1.00	28.25	AG2	C
ATOM	5598	C31	AG2	990	17.783	-0.456	29.429	1.00	27.58	AG2	C
ATOM	5599	C32	AG2	990	22.739	-10.149	30.611	1.00	28.20	AG2	C
ATOM	5600	C33	AG2	990	22.063	-11.449	28.323	1.00	29.06	AG2	C
ATOM	5601	C34	AG2	990	23.120	-8.876	26.906	1.00	27.28	AG2	C
ATOM	5602	C35	AG2	990	24.261	-8.390	28.706	1.00	26.41	AG2	C
TER	5603		AG2	990						AG2	

END

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## FIGURE 4

Form 10. Coordinates for the crystal structure of  
 REMARK human topoisomerase I (topo70) in covalent complex with 22mer  
 REMARK duplex DNA and the anti-cancer compound MJ-II-38.  
 REMARK coordinates from restrained individual B-factor refinement  
 REMARK refinement resolution: 20.0 - 3.0 Å  
 REMARK starting r= 0.2325 free\_r= 0.2876  
 REMARK final r= 0.2365 free\_r= 0.2904  
 REMARK B rmsd for bonded mainchain atoms= 1.510 target= 1.5  
 REMARK B rmsd for bonded sidechain atoms= 2.316 target= 2.0  
 REMARK B rmsd for angle mainchain atoms= 2.679 target= 2.0  
 REMARK B rmsd for angle sidechain atoms= 3.979 target= 2.5  
 REMARK wa= 5.77084  
 REMARK rweight=0.1  
 REMARK target= mlf steps= 30  
 REMARK sg= C2 a= 260.940 b= 74.659 c= 57.494 alpha= 90 beta= 96.939 gamma= 90  
 REMARK parameter file 1 : MSI\_CNX\_TOPPAR:protein.param  
 REMARK parameter file 2 : MSI\_CNX\_TOPPAR:dna-rna.param  
 REMARK parameter file 3 : mjii38/M38\_par.par  
 REMARK molecular structure file: generate.mtf  
 REMARK input coordinates: minimize2.pdb  
 REMARK reflection file= form10.cv  
 REMARK ncs= none  
 REMARK B-correction resolution: 6.0 - 3.0  
 REMARK initial B-factor correction applied to fobs :  
 REMARK B11= 3.710 B22= -16.765 B33= 13.056  
 REMARK B12= 0.000 B13= -0.685 B23= 0.000  
 REMARK B-factor correction applied to coordinate array B: 0.220  
 REMARK bulk solvent: (Mask) density level= 0.312682 e/Å<sup>3</sup>, B-factor= 10.4879  
 Å<sup>2</sup>  
 REMARK reflections with |Fobs|/sigma\_F < 0.0 rejected  
 REMARK reflections with |Fobs| > 10000 \* rms(Fobs) rejected  
 REMARK theoretical total number of refl. in resol. range: 22130 ( 100.0 % )  
 REMARK number of unobserved reflections (no entry or |F|=0): 2681 ( 12.1 % )  
 REMARK number of reflections rejected: 0 ( 0.0 % )  
 REMARK total number of reflections used: 19449 ( 87.9 % )  
 REMARK number of reflections in working set: 17541 ( 79.3 % )  
 REMARK number of reflections in test set: 1908 ( 8.6 % )  
 REMARK FILENAME="bindividual3.pdb"  
 REMARK DATE:Nov-02-2000 19:20:35 created by user: bart  
 REMARK Written by CNX VERSION:2000

ATOM	1	CB	ALA	198	108.264	-5.889	38.498	1.00	68.79	A	C
ATOM	2	C	ALA	198	106.446	-6.554	40.113	1.00	68.43	A	C
ATOM	3	O	ALA	198	106.654	-6.618	41.336	1.00	68.63	A	O
ATOM	4	N	ALA	198	107.372	-4.205	40.121	1.00	67.88	A	N
ATOM	5	CA	ALA	198	107.026	-5.398	39.282	1.00	68.33	A	C
ATOM	6	N	ALA	199	105.750	-7.466	39.419	1.00	68.07	A	N
ATOM	7	CA	ALA	199	105.103	-8.669	39.994	1.00	67.28	A	C
ATOM	8	CB	ALA	199	104.432	-8.334	41.351	1.00	67.35	A	C
ATOM	9	C	ALA	199	104.042	-9.211	38.999	1.00	65.89	A	C
ATOM	10	O	ALA	199	104.375	-9.767	37.946	1.00	65.79	A	O
ATOM	11	N	ALA	200	102.776	-9.101	39.402	1.00	63.71	A	N
ATOM	12	CA	ALA	200	101.590	-9.472	38.623	1.00	61.18	A	C
ATOM	13	CB	ALA	200	100.948	-10.774	39.130	1.00	61.19	A	C
ATOM	14	C	ALA	200	100.735	-8.256	38.994	1.00	59.08	A	C
ATOM	15	O	ALA	200	100.860	-7.759	40.121	1.00	59.33	A	O
ATOM	16	N	ALA	201	99.838	-7.785	38.127	1.00	55.69	A	N
ATOM	17	CA	ALA	201	99.096	-6.575	38.486	1.00	51.61	A	C
ATOM	18	CB	ALA	201	99.908	-5.333	37.994	1.00	51.98	A	C
ATOM	19	C	ALA	201	97.616	-6.389	38.136	1.00	48.05	A	C



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ATOM	20	O	ALA	201	96.734	-6.829	38.875	1.00	46.90	A	O
ATOM	21	N	ALA	202	97.395	-5.602	37.076	1.00	44.46	A	N
ATOM	22	CA	ALA	202	96.089	-5.203	36.526	1.00	39.49	A	C
ATOM	23	CB	ALA	202	94.963	-6.242	36.838	1.00	40.14	A	C
ATOM	24	C	ALA	202	95.738	-3.830	37.107	1.00	34.96	A	C
ATOM	25	O	ALA	202	95.021	-3.735	38.107	1.00	35.84	A	O
ATOM	26	N	TRP	203	96.288	-2.781	36.495	1.00	28.35	A	N
ATOM	27	CA	TRP	203	96.027	-1.417	36.941	1.00	24.30	A	C
ATOM	28	CB	TRP	203	97.169	-0.474	36.538	1.00	21.79	A	C
ATOM	29	CG	TRP	203	96.971	0.963	36.974	1.00	18.78	A	C
ATOM	30	CD2	TRP	203	97.338	2.152	36.253	1.00	17.69	A	C
ATOM	31	CE2	TRP	203	96.969	3.259	37.052	1.00	17.50	A	C
ATOM	32	CE3	TRP	203	97.941	2.389	35.012	1.00	16.93	A	C
ATOM	33	CD1	TRP	203	96.407	1.391	38.144	1.00	19.18	A	C
ATOM	34	NE1	TRP	203	96.406	2.769	38.200	1.00	18.06	A	N
ATOM	35	CZ2	TRP	203	97.183	4.578	36.651	1.00	16.16	A	C
ATOM	36	CZ3	TRP	203	98.156	3.707	34.610	1.00	16.22	A	C
ATOM	37	CH2	TRP	203	97.776	4.784	35.429	1.00	17.01	A	C
ATOM	38	C	TRP	203	94.727	-0.899	36.343	1.00	23.49	A	C
ATOM	39	O	TRP	203	94.537	-0.922	35.132	1.00	24.51	A	O
ATOM	40	N	LYS	204	93.829	-0.431	37.194	1.00	22.29	A	N
ATOM	41	CA	LYS	204	92.570	0.121	36.725	1.00	21.07	A	C
ATOM	42	CB	LYS	204	91.450	-0.241	37.698	1.00	21.11	A	C
ATOM	43	CG	LYS	204	91.243	-1.736	37.895	1.00	21.00	A	C
ATOM	44	CD	LYS	204	90.145	-1.941	38.921	1.00	21.89	A	C
ATOM	45	CE	LYS	204	89.571	-3.344	38.915	1.00	21.16	A	C
ATOM	46	NZ	LYS	204	88.280	-3.367	39.680	1.00	21.82	A	N
ATOM	47	C	LYS	204	92.718	1.647	36.620	1.00	20.91	A	C
ATOM	48	O	LYS	204	92.142	2.400	37.410	1.00	20.55	A	O
ATOM	49	N	TRP	205	93.489	2.094	35.635	1.00	20.48	A	N
ATOM	50	CA	TRP	205	93.733	3.513	35.433	1.00	22.02	A	C
ATOM	51	CB	TRP	205	94.632	3.733	34.213	1.00	22.18	A	C
ATOM	52	CG	TRP	205	94.102	3.132	32.951	1.00	22.84	A	C
ATOM	53	CD2	TRP	205	93.062	3.656	32.126	1.00	22.75	A	C
ATOM	54	CE2	TRP	205	92.837	2.719	31.094	1.00	22.60	A	C
ATOM	55	CE3	TRP	205	92.290	4.822	32.163	1.00	22.19	A	C
ATOM	56	CD1	TRP	205	94.469	1.944	32.395	1.00	22.59	A	C
ATOM	57	NE1	TRP	205	93.711	1.684	31.281	1.00	21.71	A	N
ATOM	58	CZ2	TRP	205	91.870	2.909	30.110	1.00	23.97	A	C
ATOM	59	CZ3	TRP	205	91.331	5.011	31.190	1.00	23.97	A	C
ATOM	60	CH2	TRP	205	91.127	4.056	30.173	1.00	24.57	A	C
ATOM	61	C	TRP	205	92.488	4.390	35.315	1.00	23.80	A	C
ATOM	62	O	TRP	205	92.576	5.601	35.455	1.00	24.83	A	O
ATOM	63	N	TRP	206	91.336	3.789	35.042	1.00	25.41	A	N
ATOM	64	CA	TRP	206	90.105	4.555	34.901	1.00	27.01	A	C
ATOM	65	CB	TRP	206	89.039	3.748	34.168	1.00	24.48	A	C
ATOM	66	CG	TRP	206	88.939	2.318	34.602	1.00	23.04	A	C
ATOM	67	CD2	TRP	206	89.770	1.229	34.178	1.00	21.14	A	C
ATOM	68	CE2	TRP	206	89.292	0.070	34.813	1.00	20.27	A	C
ATOM	69	CE3	TRP	206	90.872	1.123	33.321	1.00	22.58	A	C
ATOM	70	CD1	TRP	206	88.021	1.788	35.453	1.00	22.29	A	C
ATOM	71	NE1	TRP	206	88.224	0.440	35.586	1.00	20.92	A	N
ATOM	72	CZ2	TRP	206	89.877	-1.190	34.620	1.00	21.11	A	C
ATOM	73	CZ3	TRP	206	91.457	-0.139	33.128	1.00	22.55	A	C
ATOM	74	CH2	TRP	206	90.956	-1.272	33.775	1.00	20.36	A	C
ATOM	75	C	TRP	206	89.555	5.087	36.210	1.00	30.29	A	C
ATOM	76	O	TRP	206	88.850	6.100	36.218	1.00	31.17	A	O
ATOM	77	N	GLU	207	89.910	4.438	37.316	1.00	33.70	A	N
ATOM	78	CA	GLU	207	89.441	4.855	38.638	1.00	37.64	A	C
ATOM	79	CB	GLU	207	89.336	3.642	39.565	1.00	38.71	A	C
ATOM	80	CG	GLU	207	88.268	2.648	39.125	1.00	42.59	A	C
ATOM	81	CD	GLU	207	88.384	1.265	39.765	1.00	44.67	A	C
ATOM	82	OE1	GLU	207	89.333	1.023	40.548	1.00	45.34	A	O

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ATOM	83	OE2	GLU	207	87.516	0.410	39.466	1.00	44.51	A	O
ATOM	84	C	GLU	207	90.280	5.972	39.284	1.00	39.92	A	C
ATOM	85	O	GLU	207	89.919	6.499	40.340	1.00	39.42	A	O
ATOM	86	N	GLU	208	91.386	6.342	38.640	1.00	42.85	A	N
ATOM	87	CA	GLU	208	92.251	7.400	39.152	1.00	46.29	A	C
ATOM	88	CB	GLU	208	93.674	7.240	38.607	1.00	47.17	A	C
ATOM	89	CG	GLU	208	94.275	5.832	38.734	1.00	50.27	A	C
ATOM	90	CD	GLU	208	94.436	5.323	40.177	1.00	52.06	A	C
ATOM	91	OE1	GLU	208	94.398	6.132	41.135	1.00	52.77	A	O
ATOM	92	OE2	GLU	208	94.620	4.095	40.346	1.00	52.59	A	O
ATOM	93	C	GLU	208	91.675	8.744	38.720	1.00	48.57	A	C
ATOM	94	O	GLU	208	90.612	8.788	38.101	1.00	48.67	A	O
ATOM	95	N	GLU	209	92.351	9.839	39.064	1.00	52.00	A	N
ATOM	96	CA	GLU	209	91.872	11.161	38.678	1.00	55.65	A	C
ATOM	97	CB	GLU	209	92.132	12.206	39.762	1.00	57.04	A	C
ATOM	98	CG	GLU	209	90.969	12.378	40.740	1.00	59.84	A	C
ATOM	99	CD	GLU	209	90.725	13.837	41.137	1.00	62.18	A	C
ATOM	100	OE1	GLU	209	89.546	14.201	41.360	1.00	61.96	A	O
ATOM	101	OE2	GLU	209	91.702	14.620	41.227	1.00	62.78	A	O
ATOM	102	C	GLU	209	92.419	11.643	37.349	1.00	57.62	A	C
ATOM	103	O	GLU	209	93.521	11.283	36.939	1.00	56.87	A	O
ATOM	104	N	ARG	210	91.621	12.463	36.680	1.00	61.00	A	N
ATOM	105	CA	ARG	210	91.966	13.014	35.380	1.00	64.31	A	C
ATOM	106	CB	ARG	210	90.676	13.406	34.655	1.00	65.91	A	C
ATOM	107	CG	ARG	210	89.512	12.445	34.927	1.00	69.09	A	C
ATOM	108	CD	ARG	210	89.209	11.539	33.739	1.00	73.01	A	C
ATOM	109	NE	ARG	210	88.428	12.230	32.710	1.00	76.79	A	N
ATOM	110	CZ	ARG	210	88.617	12.110	31.395	1.00	77.92	A	C
ATOM	111	NH1	ARG	210	87.846	12.785	30.554	1.00	78.76	A	N
ATOM	112	NH2	ARG	210	89.571	11.325	30.916	1.00	78.01	A	N
ATOM	113	C	ARG	210	92.888	14.226	35.544	1.00	65.21	A	C
ATOM	114	O	ARG	210	92.556	15.172	36.255	1.00	65.20	A	O
ATOM	115	N	TYR	211	94.058	14.174	34.911	1.00	66.58	A	N
ATOM	116	CA	TYR	211	95.039	15.265	34.967	1.00	67.98	A	C
ATOM	117	CB	TYR	211	96.283	14.918	34.129	1.00	69.71	A	C
ATOM	118	CG	TYR	211	97.314	14.040	34.811	1.00	71.74	A	C
ATOM	119	CD1	TYR	211	98.484	14.589	35.330	1.00	72.03	A	C
ATOM	120	CE1	TYR	211	99.440	13.795	35.953	1.00	73.16	A	C
ATOM	121	CD2	TYR	211	97.125	12.663	34.930	1.00	72.99	A	C
ATOM	122	CE2	TYR	211	98.077	11.857	35.553	1.00	74.13	A	C
ATOM	123	CZ	TYR	211	99.232	12.432	36.065	1.00	74.27	A	C
ATOM	124	OH	TYR	211	100.165	11.651	36.711	1.00	74.33	A	O
ATOM	125	C	TYR	211	94.447	16.565	34.421	1.00	68.17	A	C
ATOM	126	O	TYR	211	93.547	16.538	33.582	1.00	69.24	A	O
ATOM	127	N	PRO	212	94.947	17.723	34.893	1.00	68.09	A	N
ATOM	128	CD	PRO	212	95.927	17.862	35.985	1.00	69.10	A	C
ATOM	129	CA	PRO	212	94.480	19.043	34.452	1.00	67.28	A	C
ATOM	130	CB	PRO	212	95.410	19.994	35.195	1.00	68.38	A	C
ATOM	131	CG	PRO	212	95.665	19.267	36.473	1.00	69.38	A	C
ATOM	132	C	PRO	212	94.648	19.200	32.949	1.00	66.03	A	C
ATOM	133	O	PRO	212	95.534	18.596	32.359	1.00	66.57	A	O
ATOM	134	N	GLU	213	93.806	20.026	32.340	1.00	64.98	A	N
ATOM	135	CA	GLU	213	93.846	20.263	30.897	1.00	62.64	A	C
ATOM	136	CB	GLU	213	92.874	21.401	30.532	1.00	64.93	A	C
ATOM	137	CG	GLU	213	92.067	21.191	29.238	1.00	68.55	A	C
ATOM	138	CD	GLU	213	92.809	21.626	27.976	1.00	70.45	A	C
ATOM	139	OE1	GLU	213	92.875	20.837	27.006	1.00	70.67	A	O
ATOM	140	OE2	GLU	213	93.312	22.770	27.948	1.00	72.46	A	O
ATOM	141	C	GLU	213	95.271	20.589	30.423	1.00	58.71	A	C
ATOM	142	O	GLU	213	95.987	21.367	31.064	1.00	58.67	A	O
ATOM	143	N	GLY	214	95.697	19.924	29.349	1.00	53.42	A	N
ATOM	144	CA	GLY	214	97.022	20.156	28.800	1.00	47.36	A	C
ATOM	145	C	GLY	214	98.038	19.067	29.091	1.00	42.88	A	C

ATOM	146	O	GLY	214	98.518	18.391	28.176	1.00	42.43	A	O
ATOM	147	N	ILE	215	98.355	18.903	30.372	1.00	38.34	A	N
ATOM	148	CA	ILE	215	99.323	17.918	30.834	1.00	33.85	A	C
ATOM	149	CB	ILE	215	99.615	18.109	32.342	1.00	32.70	A	C
ATOM	150	CG2	ILE	215	100.449	16.966	32.882	1.00	31.91	A	C
ATOM	151	CG1	ILE	215	100.355	19.430	32.555	1.00	32.55	A	C
ATOM	152	CD1	ILE	215	100.862	19.651	33.969	1.00	32.97	A	C
ATOM	153	C	ILE	215	98.971	16.458	30.530	1.00	32.15	A	C
ATOM	154	O	ILE	215	97.887	15.972	30.863	1.00	31.64	A	O
ATOM	155	N	LYS	216	99.903	15.770	29.877	1.00	30.06	A	N
ATOM	156	CA	LYS	216	99.719	14.375	29.520	1.00	27.94	A	C
ATOM	157	CB	LYS	216	100.159	14.124	28.083	1.00	27.19	A	C
ATOM	158	CG	LYS	216	99.412	14.935	27.064	1.00	29.87	A	C
ATOM	159	CD	LYS	216	97.905	14.701	27.141	1.00	32.16	A	C
ATOM	160	CE	LYS	216	97.153	15.602	26.158	1.00	32.46	A	C
ATOM	161	NZ	LYS	216	95.672	15.422	26.210	1.00	33.84	A	N
ATOM	162	C	LYS	216	100.484	13.454	30.458	1.00	26.99	A	C
ATOM	163	O	LYS	216	100.258	12.239	30.449	1.00	28.48	A	O
ATOM	164	N	TRP	217	101.397	14.019	31.248	1.00	23.98	A	N
ATOM	165	CA	TRP	217	102.185	13.226	32.194	1.00	22.89	A	C
ATOM	166	CB	TRP	217	102.967	12.136	31.454	1.00	19.83	A	C
ATOM	167	CG	TRP	217	103.754	12.612	30.271	1.00	16.82	A	C
ATOM	168	CD2	TRP	217	105.076	13.168	30.280	1.00	14.52	A	C
ATOM	169	CE2	TRP	217	105.418	13.456	28.939	1.00	13.99	A	C
ATOM	170	CE3	TRP	217	106.001	13.453	31.290	1.00	11.60	A	C
ATOM	171	CD1	TRP	217	103.362	12.583	28.963	1.00	16.89	A	C
ATOM	172	NE1	TRP	217	104.356	13.090	28.156	1.00	17.02	A	N
ATOM	173	CZ2	TRP	217	106.639	14.012	28.585	1.00	10.55	A	C
ATOM	174	CZ3	TRP	217	107.215	14.009	30.936	1.00	11.25	A	C
ATOM	175	CH2	TRP	217	107.523	14.283	29.592	1.00	11.19	A	C
ATOM	176	C	TRP	217	103.142	14.043	33.067	1.00	24.07	A	C
ATOM	177	O	TRP	217	103.232	15.268	32.935	1.00	27.42	A	O
ATOM	178	N	LYS	218	103.848	13.364	33.968	1.00	23.03	A	N
ATOM	179	CA	LYS	218	104.809	14.026	34.846	1.00	22.50	A	C
ATOM	180	CB	LYS	218	104.245	14.197	36.255	1.00	25.58	A	C
ATOM	181	CG	LYS	218	103.484	15.519	36.455	1.00	31.28	A	C
ATOM	182	CD	LYS	218	103.084	15.716	37.926	1.00	36.30	A	C
ATOM	183	CE	LYS	218	102.976	17.201	38.309	1.00	38.13	A	C
ATOM	184	NZ	LYS	218	103.129	17.387	39.792	1.00	40.11	A	N
ATOM	185	C	LYS	218	106.161	13.325	34.873	1.00	20.33	A	C
ATOM	186	O	LYS	218	107.167	13.933	35.206	1.00	19.64	A	O
ATOM	187	N	PHE	219	106.172	12.041	34.531	1.00	19.20	A	N
ATOM	188	CA	PHE	219	107.405	11.254	34.471	1.00	17.64	A	C
ATOM	189	CB	PHE	219	107.588	10.390	35.712	1.00	17.88	A	C
ATOM	190	CG	PHE	219	108.879	9.611	35.724	1.00	17.86	A	C
ATOM	191	CD1	PHE	219	110.052	10.196	36.184	1.00	18.02	A	C
ATOM	192	CD2	PHE	219	108.917	8.288	35.298	1.00	17.86	A	C
ATOM	193	CE1	PHE	219	111.244	9.478	36.223	1.00	18.56	A	C
ATOM	194	CE2	PHE	219	110.101	7.564	35.333	1.00	18.71	A	C
ATOM	195	CZ	PHE	219	111.271	8.162	35.800	1.00	18.18	A	C
ATOM	196	C	PHE	219	107.366	10.369	33.232	1.00	16.56	A	C
ATOM	197	O	PHE	219	106.315	9.847	32.872	1.00	14.64	A	O
ATOM	198	N	LEU	220	108.514	10.207	32.581	1.00	15.99	A	N
ATOM	199	CA	LEU	220	108.597	9.410	31.366	1.00	15.74	A	C
ATOM	200	CB	LEU	220	108.016	10.196	30.190	1.00	15.96	A	C
ATOM	201	CG	LEU	220	108.171	9.605	28.787	1.00	17.25	A	C
ATOM	202	CD1	LEU	220	107.305	8.374	28.627	1.00	16.81	A	C
ATOM	203	CD2	LEU	220	107.778	10.645	27.769	1.00	17.51	A	C
ATOM	204	C	LEU	220	110.031	9.010	31.056	1.00	15.72	A	C
ATOM	205	O	LEU	220	110.899	9.864	30.884	1.00	16.55	A	O
ATOM	206	N	GLU	221	110.258	7.708	30.937	1.00	14.69	A	N
ATOM	207	CA	GLU	221	111.580	7.195	30.642	1.00	15.91	A	C
ATOM	208	CB	GLU	221	112.258	6.767	31.932	1.00	19.18	A	C

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ATOM	209	CG	GLU	221	113.704	6.328	31.779	1.00	24.04	A	C
ATOM	210	CD	GLU	221	114.384	6.135	33.125	1.00	26.25	A	C
ATOM	211	OE1	GLU	221	114.342	7.075	33.958	1.00	24.67	A	O
ATOM	212	OE2	GLU	221	114.950	5.041	33.350	1.00	28.07	A	O
ATOM	213	C	GLU	221	111.479	6.007	29.717	1.00	15.80	A	C
ATOM	214	O	GLU	221	110.633	5.140	29.913	1.00	15.53	A	O
ATOM	215	N	HIS	222	112.332	5.980	28.698	1.00	16.83	A	N
ATOM	216	CA	HIS	222	112.347	4.884	27.730	1.00	18.09	A	C
ATOM	217	CB	HIS	222	111.382	5.144	26.573	1.00	18.45	A	C
ATOM	218	CG	HIS	222	111.534	6.490	25.936	1.00	18.69	A	C
ATOM	219	CD2	HIS	222	111.246	7.731	26.393	1.00	18.84	A	C
ATOM	220	ND1	HIS	222	111.979	6.654	24.645	1.00	21.82	A	N
ATOM	221	CE1	HIS	222	111.958	7.937	24.332	1.00	21.09	A	C
ATOM	222	NE2	HIS	222	111.516	8.612	25.376	1.00	18.20	A	N
ATOM	223	C	HIS	222	113.749	4.676	27.204	1.00	19.03	A	C
ATOM	224	O	HIS	222	114.630	5.490	27.466	1.00	20.30	A	O
ATOM	225	N	LYS	223	113.960	3.579	26.485	1.00	19.14	A	N
ATOM	226	CA	LYS	223	115.275	3.262	25.939	1.00	20.17	A	C
ATOM	227	CB	LYS	223	115.580	1.772	26.131	1.00	23.26	A	C
ATOM	228	CG	LYS	223	115.885	1.355	27.570	1.00	26.10	A	C
ATOM	229	CD	LYS	223	117.332	1.681	27.961	1.00	28.54	A	C
ATOM	230	CE	LYS	223	117.627	1.276	29.409	1.00	29.06	A	C
ATOM	231	NZ	LYS	223	119.083	1.359	29.733	1.00	29.29	A	N
ATOM	232	C	LYS	223	115.399	3.644	24.470	1.00	19.68	A	C
ATOM	233	O	LYS	223	116.158	3.029	23.711	1.00	20.97	A	O
ATOM	234	N	GLY	224	114.636	4.656	24.072	1.00	18.91	A	N
ATOM	235	CA	GLY	224	114.663	5.120	22.697	1.00	17.23	A	C
ATOM	236	C	GLY	224	114.192	4.089	21.686	1.00	16.62	A	C
ATOM	237	O	GLY	224	113.831	2.958	22.038	1.00	16.91	A	O
ATOM	238	N	PRO	225	114.173	4.468	20.398	1.00	15.35	A	N
ATOM	239	CD	PRO	225	114.447	5.827	19.888	1.00	12.21	A	C
ATOM	240	CA	PRO	225	113.741	3.577	19.319	1.00	11.47	A	C
ATOM	241	CB	PRO	225	113.532	4.543	18.159	1.00	10.67	A	C
ATOM	242	CG	PRO	225	114.555	5.603	18.410	1.00	10.09	A	C
ATOM	243	C	PRO	225	114.777	2.519	18.980	1.00	11.22	A	C
ATOM	244	O	PRO	225	115.875	2.516	19.534	1.00	10.52	A	O
ATOM	245	N	VAL	226	114.386	1.592	18.108	1.00	11.85	A	N
ATOM	246	CA	VAL	226	115.266	0.523	17.637	1.00	11.40	A	C
ATOM	247	CB	VAL	226	114.728	-0.860	17.968	1.00	7.07	A	C
ATOM	248	CG1	VAL	226	115.555	-1.912	17.294	1.00	5.41	A	C
ATOM	249	CG2	VAL	226	114.794	-1.063	19.426	1.00	7.56	A	C
ATOM	250	C	VAL	226	115.434	0.649	16.131	1.00	14.81	A	C
ATOM	251	O	VAL	226	114.490	0.473	15.362	1.00	14.56	A	O
ATOM	252	N	PHE	227	116.651	0.989	15.728	1.00	18.63	A	N
ATOM	253	CA	PHE	227	116.983	1.173	14.328	1.00	22.00	A	C
ATOM	254	CB	PHE	227	118.284	1.967	14.208	1.00	21.15	A	C
ATOM	255	CG	PHE	227	118.187	3.341	14.783	1.00	20.44	A	C
ATOM	256	CD1	PHE	227	117.735	4.403	14.006	1.00	20.29	A	C
ATOM	257	CD2	PHE	227	118.455	3.560	16.123	1.00	19.27	A	C
ATOM	258	CE1	PHE	227	117.544	5.659	14.567	1.00	21.14	A	C
ATOM	259	CE2	PHE	227	118.264	4.820	16.693	1.00	19.18	A	C
ATOM	260	CZ	PHE	227	117.807	5.866	15.918	1.00	19.74	A	C
ATOM	261	C	PHE	227	117.065	-0.120	13.527	1.00	24.68	A	C
ATOM	262	O	PHE	227	117.473	-1.166	14.039	1.00	23.57	A	O
ATOM	263	N	ALA	228	116.612	-0.039	12.278	1.00	27.78	A	N
ATOM	264	CA	ALA	228	116.638	-1.168	11.363	1.00	29.74	A	C
ATOM	265	CB	ALA	228	115.991	-0.778	10.038	1.00	29.52	A	C
ATOM	266	C	ALA	228	118.110	-1.497	11.170	1.00	31.05	A	C
ATOM	267	O	ALA	228	118.938	-0.590	11.051	1.00	30.52	A	O
ATOM	268	N	PRO	229	118.456	-2.796	11.140	1.00	32.98	A	N
ATOM	269	CD	PRO	229	117.489	-3.906	11.061	1.00	32.93	A	C
ATOM	270	CA	PRO	229	119.834	-3.285	10.969	1.00	33.37	A	C
ATOM	271	CB	PRO	229	119.663	-4.801	10.980	1.00	33.23	A	C

ATOM	272	CG	PRO	229	118.301	-4.979	10.365	1.00	35.09	A	C
ATOM	273	C	PRO	229	120.486	-2.809	9.674	1.00	34.44	A	C
ATOM	274	O	PRO	229	119.839	-2.738	8.623	1.00	35.05	A	O
ATOM	275	N	PRO	230	121.777	-2.449	9.744	1.00	34.68	A	N
ATOM	276	CD	PRO	230	122.605	-2.456	10.962	1.00	34.73	A	C
ATOM	277	CA	PRO	230	122.549	-1.969	8.592	1.00	34.07	A	C
ATOM	278	CB	PRO	230	123.985	-1.911	9.134	1.00	34.97	A	C
ATOM	279	CG	PRO	230	123.950	-2.771	10.404	1.00	35.80	A	C
ATOM	280	C	PRO	230	122.437	-2.857	7.358	1.00	33.90	A	C
ATOM	281	O	PRO	230	122.149	-4.049	7.461	1.00	34.61	A	O
ATOM	282	N	TYR	231	122.659	-2.255	6.193	1.00	33.38	A	N
ATOM	283	CA	TYR	231	122.583	-2.952	4.918	1.00	33.27	A	C
ATOM	284	CB	TYR	231	122.664	-1.949	3.769	1.00	30.55	A	C
ATOM	285	CG	TYR	231	122.562	-2.590	2.407	1.00	29.13	A	C
ATOM	286	CD1	TYR	231	121.392	-3.240	2.009	1.00	28.75	A	C
ATOM	287	CE1	TYR	231	121.308	-3.877	0.776	1.00	25.55	A	C
ATOM	288	CD2	TYR	231	123.643	-2.589	1.529	1.00	28.30	A	C
ATOM	289	CE2	TYR	231	123.564	-3.225	0.294	1.00	24.26	A	C
ATOM	290	CZ	TYR	231	122.399	-3.864	-0.066	1.00	24.68	A	C
ATOM	291	OH	TYR	231	122.329	-4.522	-1.259	1.00	26.97	A	O
ATOM	292	C	TYR	231	123.697	-3.962	4.747	1.00	35.41	A	C
ATOM	293	O	TYR	231	124.866	-3.619	4.874	1.00	36.48	A	O
ATOM	294	N	GLU	232	123.336	-5.207	4.453	1.00	38.78	A	N
ATOM	295	CA	GLU	232	124.340	-6.249	4.232	1.00	42.12	A	C
ATOM	296	CB	GLU	232	123.939	-7.574	4.906	1.00	45.19	A	C
ATOM	297	CG	GLU	232	123.937	-7.516	6.438	1.00	51.42	A	C
ATOM	298	CD	GLU	232	125.233	-6.922	7.011	1.00	56.52	A	C
ATOM	299	OE1	GLU	232	125.181	-5.832	7.639	1.00	57.46	A	O
ATOM	300	OE2	GLU	232	126.308	-7.542	6.822	1.00	58.56	A	O
ATOM	301	C	GLU	232	124.507	-6.418	2.727	1.00	41.82	A	C
ATOM	302	O	GLU	232	123.620	-6.932	2.050	1.00	42.33	A	O
ATOM	303	N	PRO	233	125.626	-5.926	2.175	1.00	42.03	A	N
ATOM	304	CD	PRO	233	126.661	-5.136	2.870	1.00	42.86	A	C
ATOM	305	CA	PRO	233	125.921	-6.006	0.743	1.00	42.45	A	C
ATOM	306	CB	PRO	233	127.353	-5.494	0.672	1.00	42.84	A	C
ATOM	307	CG	PRO	233	127.346	-4.416	1.725	1.00	42.73	A	C
ATOM	308	C	PRO	233	125.763	-7.371	0.093	1.00	42.76	A	C
ATOM	309	O	PRO	233	126.250	-8.368	0.615	1.00	43.09	A	O
ATOM	310	N	LEU	234	125.059	-7.388	-1.042	1.00	43.55	A	N
ATOM	311	CA	LEU	234	124.803	-8.593	-1.830	1.00	44.85	A	C
ATOM	312	CB	LEU	234	124.219	-8.225	-3.201	1.00	43.56	A	C
ATOM	313	CG	LEU	234	122.747	-7.863	-3.443	1.00	43.25	A	C
ATOM	314	CD1	LEU	234	122.575	-7.379	-4.881	1.00	42.87	A	C
ATOM	315	CD2	LEU	234	121.853	-9.061	-3.200	1.00	41.69	A	C
ATOM	316	C	LEU	234	126.094	-9.358	-2.073	1.00	47.31	A	C
ATOM	317	O	LEU	234	127.156	-8.751	-2.273	1.00	47.94	A	O
ATOM	318	N	PRO	235	126.024	-10.703	-2.079	1.00	48.99	A	N
ATOM	319	CD	PRO	235	124.824	-11.526	-1.860	1.00	48.07	A	C
ATOM	320	CA	PRO	235	127.199	-11.555	-2.310	1.00	50.11	A	C
ATOM	321	CB	PRO	235	126.614	-12.965	-2.241	1.00	49.35	A	C
ATOM	322	CG	PRO	235	125.173	-12.770	-2.608	1.00	48.62	A	C
ATOM	323	C	PRO	235	127.852	-11.273	-3.667	1.00	52.02	A	C
ATOM	324	O	PRO	235	127.463	-10.345	-4.374	1.00	52.53	A	O
ATOM	325	N	GLU	236	128.849	-12.067	-4.029	1.00	54.27	A	N
ATOM	326	CA	GLU	236	129.545	-11.860	-5.295	1.00	55.72	A	C
ATOM	327	CB	GLU	236	131.031	-12.211	-5.157	1.00	59.56	A	C
ATOM	328	CG	GLU	236	131.322	-13.378	-4.203	1.00	66.54	A	C
ATOM	329	CD	GLU	236	130.499	-14.632	-4.499	1.00	69.21	A	C
ATOM	330	OE1	GLU	236	129.663	-15.013	-3.648	1.00	70.42	A	O
ATOM	331	OE2	GLU	236	130.684	-15.234	-5.581	1.00	71.00	A	O
ATOM	332	C	GLU	236	128.943	-12.562	-6.509	1.00	53.51	A	C
ATOM	333	O	GLU	236	128.985	-12.021	-7.611	1.00	54.02	A	O
ATOM	334	N	ASN	237	128.365	-13.744	-6.317	1.00	50.77	A	N

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ATOM	335	CA	ASN	237	127.789	-14.467	-7.447	1.00	49.08	A	C
ATOM	336	CB	ASN	237	127.729	-15.983	-7.182	1.00	49.07	A	C
ATOM	337	CG	ASN	237	126.808	-16.347	-6.041	1.00	49.37	A	C
ATOM	338	OD1	ASN	237	127.153	-16.180	-4.871	1.00	48.76	A	O
ATOM	339	ND2	ASN	237	125.632	-16.871	-6.376	1.00	50.00	A	N
ATOM	340	C	ASN	237	126.443	-13.925	-7.933	1.00	47.63	A	C
ATOM	341	O	ASN	237	125.806	-14.517	-8.808	1.00	48.17	A	O
ATOM	342	N	VAL	238	126.016	-12.801	-7.359	1.00	45.78	A	N
ATOM	343	CA	VAL	238	124.770	-12.142	-7.751	1.00	43.43	A	C
ATOM	344	CB	VAL	238	123.912	-11.768	-6.538	1.00	42.90	A	C
ATOM	345	CG1	VAL	238	122.694	-10.958	-6.980	1.00	43.46	A	C
ATOM	346	CG2	VAL	238	123.466	-13.026	-5.830	1.00	42.04	A	C
ATOM	347	C	VAL	238	125.148	-10.884	-8.529	1.00	42.07	A	C
ATOM	348	O	VAL	238	125.466	-9.848	-7.955	1.00	40.08	A	O
ATOM	349	N	LYS	239	125.118	-11.001	-9.847	1.00	41.46	A	N
ATOM	350	CA	LYS	239	125.494	-9.911	-10.720	1.00	41.33	A	C
ATOM	351	CB	LYS	239	126.224	-10.483	-11.931	1.00	42.45	A	C
ATOM	352	CG	LYS	239	127.740	-10.452	-11.831	1.00	44.44	A	C
ATOM	353	CD	LYS	239	128.289	-11.194	-10.628	1.00	44.71	A	C
ATOM	354	CE	LYS	239	129.809	-11.224	-10.679	1.00	45.50	A	C
ATOM	355	NZ	LYS	239	130.381	-9.852	-10.775	1.00	46.26	A	N
ATOM	356	C	LYS	239	124.371	-8.996	-11.194	1.00	40.96	A	C
ATOM	357	O	LYS	239	123.246	-9.440	-11.430	1.00	40.46	A	O
ATOM	358	N	PHE	240	124.692	-7.707	-11.308	1.00	40.01	A	N
ATOM	359	CA	PHE	240	123.758	-6.697	-11.802	1.00	38.97	A	C
ATOM	360	CB	PHE	240	123.861	-5.405	-10.984	1.00	34.83	A	C
ATOM	361	CG	PHE	240	123.092	-4.248	-11.573	1.00	32.53	A	C
ATOM	362	CD1	PHE	240	121.704	-4.263	-11.621	1.00	31.18	A	C
ATOM	363	CD2	PHE	240	123.760	-3.138	-12.082	1.00	32.24	A	C
ATOM	364	CE1	PHE	240	120.999	-3.191	-12.165	1.00	29.73	A	C
ATOM	365	CE2	PHE	240	123.059	-2.060	-12.630	1.00	29.41	A	C
ATOM	366	CZ	PHE	240	121.681	-2.089	-12.670	1.00	28.84	A	C
ATOM	367	C	PHE	240	124.168	-6.432	-13.250	1.00	40.44	A	C
ATOM	368	O	PHE	240	125.363	-6.388	-13.569	1.00	41.89	A	O
ATOM	369	N	TYR	241	123.192	-6.236	-14.127	1.00	40.68	A	N
ATOM	370	CA	TYR	241	123.513	-6.007	-15.525	1.00	41.50	A	C
ATOM	371	CB	TYR	241	123.002	-7.172	-16.368	1.00	44.60	A	C
ATOM	372	CG	TYR	241	123.606	-8.509	-16.018	1.00	47.28	A	C
ATOM	373	CD1	TYR	241	123.094	-9.272	-14.971	1.00	48.50	A	C
ATOM	374	CE1	TYR	241	123.640	-10.515	-14.653	1.00	49.59	A	C
ATOM	375	CD2	TYR	241	124.683	-9.022	-16.741	1.00	47.83	A	C
ATOM	376	CE2	TYR	241	125.234	-10.262	-16.430	1.00	49.36	A	C
ATOM	377	CZ	TYR	241	124.707	-11.002	-15.385	1.00	49.22	A	C
ATOM	378	OH	TYR	241	125.246	-12.223	-15.060	1.00	49.34	A	O
ATOM	379	C	TYR	241	122.972	-4.719	-16.107	1.00	40.62	A	C
ATOM	380	O	TYR	241	121.787	-4.423	-15.976	1.00	41.18	A	O
ATOM	381	N	TYR	242	123.851	-3.955	-16.750	1.00	39.48	A	N
ATOM	382	CA	TYR	242	123.457	-2.715	-17.406	1.00	38.64	A	C
ATOM	383	CB	TYR	242	124.138	-1.496	-16.804	1.00	35.99	A	C
ATOM	384	CG	TYR	242	123.646	-0.210	-17.434	1.00	35.40	A	C
ATOM	385	CD1	TYR	242	122.412	0.336	-17.073	1.00	34.36	A	C
ATOM	386	CE1	TYR	242	121.933	1.500	-17.662	1.00	32.38	A	C
ATOM	387	CD2	TYR	242	124.393	0.450	-18.408	1.00	35.47	A	C
ATOM	388	CE2	TYR	242	123.918	1.619	-19.005	1.00	34.29	A	C
ATOM	389	CZ	TYR	242	122.686	2.134	-18.624	1.00	32.74	A	C
ATOM	390	OH	TYR	242	122.208	3.280	-19.208	1.00	33.53	A	O
ATOM	391	C	TYR	242	123.836	-2.803	-18.871	1.00	39.60	A	C
ATOM	392	O	TYR	242	125.019	-2.758	-19.216	1.00	39.31	A	O
ATOM	393	N	ASP	243	122.824	-2.931	-19.727	1.00	40.52	A	N
ATOM	394	CA	ASP	243	123.022	-3.029	-21.171	1.00	40.51	A	C
ATOM	395	CB	ASP	243	123.733	-1.761	-21.686	1.00	40.86	A	C
ATOM	396	CG	ASP	243	123.675	-1.610	-23.203	1.00	40.45	A	C
ATOM	397	OD1	ASP	243	124.298	-0.650	-23.714	1.00	40.32	A	O

ATOM	398	OD2	ASP	243	123.018	-2.433	-23.878	1.00	39.78	A	O
ATOM	399	C	ASP	243	123.811	-4.298	-21.517	1.00	40.61	A	C
ATOM	400	O	ASP	243	124.676	-4.289	-22.391	1.00	40.11	A	O
ATOM	401	N	GLY	244	123.513	-5.385	-20.808	1.00	41.48	A	N
ATOM	402	CA	GLY	244	124.178	-6.650	-21.063	1.00	41.85	A	C
ATOM	403	C	GLY	244	125.490	-6.837	-20.332	1.00	42.34	A	C
ATOM	404	O	GLY	244	125.768	-7.931	-19.857	1.00	42.80	A	O
ATOM	405	N	LYS	245	126.316	-5.796	-20.283	1.00	43.32	A	N
ATOM	406	CA	LYS	245	127.600	-5.869	-19.589	1.00	45.19	A	C
ATOM	407	CB	LYS	245	128.516	-4.694	-19.975	1.00	48.81	A	C
ATOM	408	CG	LYS	245	129.155	-4.827	-21.370	1.00	52.61	A	C
ATOM	409	CD	LYS	245	130.102	-3.669	-21.731	1.00	55.74	A	C
ATOM	410	CE	LYS	245	129.347	-2.375	-22.088	1.00	58.29	A	C
ATOM	411	NZ	LYS	245	130.265	-1.267	-22.535	1.00	58.59	A	N
ATOM	412	C	LYS	245	127.375	-5.900	-18.084	1.00	44.58	A	C
ATOM	413	O	LYS	245	126.300	-5.562	-17.596	1.00	45.46	A	O
ATOM	414	N	VAL	246	128.386	-6.325	-17.345	1.00	44.18	A	N
ATOM	415	CA	VAL	246	128.263	-6.415	-15.900	1.00	43.90	A	C
ATOM	416	CB	VAL	246	128.951	-7.698	-15.366	1.00	42.83	A	C
ATOM	417	CG1	VAL	246	128.773	-7.819	-13.871	1.00	42.21	A	C
ATOM	418	CG2	VAL	246	128.383	-8.928	-16.060	1.00	43.37	A	C
ATOM	419	C	VAL	246	128.882	-5.208	-15.225	1.00	44.12	A	C
ATOM	420	O	VAL	246	129.669	-4.485	-15.832	1.00	45.00	A	O
ATOM	421	N	MET	247	128.452	-4.960	-13.992	1.00	44.15	A	N
ATOM	422	CA	MET	247	128.971	-3.879	-13.165	1.00	43.59	A	C
ATOM	423	CB	MET	247	128.649	-2.488	-13.739	1.00	42.88	A	C
ATOM	424	CG	MET	247	127.217	-2.019	-13.611	1.00	42.07	A	C
ATOM	425	SD	MET	247	127.149	-0.217	-13.485	1.00	41.82	A	S
ATOM	426	CE	MET	247	126.934	0.229	-15.175	1.00	42.38	A	C
ATOM	427	C	MET	247	128.399	-4.041	-11.765	1.00	43.74	A	C
ATOM	428	O	MET	247	127.281	-4.541	-11.601	1.00	43.47	A	O
ATOM	429	N	LYS	248	129.210	-3.723	-10.759	1.00	43.87	A	N
ATOM	430	CA	LYS	248	128.776	-3.821	-9.373	1.00	44.52	A	C
ATOM	431	CB	LYS	248	129.871	-4.416	-8.493	1.00	45.58	A	C
ATOM	432	CG	LYS	248	130.382	-5.753	-8.982	1.00	50.71	A	C
ATOM	433	CD	LYS	248	131.219	-6.445	-7.917	1.00	54.85	A	C
ATOM	434	CE	LYS	248	131.916	-7.687	-8.470	1.00	57.01	A	C
ATOM	435	NZ	LYS	248	133.016	-7.353	-9.437	1.00	58.64	A	N
ATOM	436	C	LYS	248	128.430	-2.426	-8.896	1.00	43.75	A	C
ATOM	437	O	LYS	248	129.214	-1.495	-9.060	1.00	44.65	A	O
ATOM	438	N	LEU	249	127.235	-2.269	-8.347	1.00	42.52	A	N
ATOM	439	CA	LEU	249	126.812	-0.969	-7.849	1.00	41.06	A	C
ATOM	440	CB	LEU	249	125.286	-0.933	-7.744	1.00	41.46	A	C
ATOM	441	CG	LEU	249	124.502	-1.427	-8.963	1.00	41.87	A	C
ATOM	442	CD1	LEU	249	123.129	-1.924	-8.562	1.00	40.84	A	C
ATOM	443	CD2	LEU	249	124.401	-0.317	-9.984	1.00	42.93	A	C
ATOM	444	C	LEU	249	127.432	-0.765	-6.467	1.00	39.79	A	C
ATOM	445	O	LEU	249	127.684	-1.730	-5.745	1.00	40.45	A	O
ATOM	446	N	SER	250	127.695	0.484	-6.102	1.00	37.93	A	N
ATOM	447	CA	SER	250	128.259	0.792	-4.790	1.00	36.58	A	C
ATOM	448	CB	SER	250	128.717	2.253	-4.749	1.00	37.21	A	C
ATOM	449	OG	SER	250	127.735	3.124	-5.280	1.00	37.61	A	O
ATOM	450	C	SER	250	127.227	0.506	-3.689	1.00	35.61	A	C
ATOM	451	O	SER	250	126.091	0.151	-3.980	1.00	36.69	A	O
ATOM	452	N	PRO	251	127.617	0.610	-2.409	1.00	34.07	A	N
ATOM	453	CD	PRO	251	128.995	0.603	-1.890	1.00	34.56	A	C
ATOM	454	CA	PRO	251	126.667	0.343	-1.322	1.00	32.93	A	C
ATOM	455	CB	PRO	251	127.537	0.479	-0.082	1.00	32.98	A	C
ATOM	456	CG	PRO	251	128.825	-0.093	-0.556	1.00	34.52	A	C
ATOM	457	C	PRO	251	125.390	1.184	-1.233	1.00	31.52	A	C
ATOM	458	O	PRO	251	124.342	0.649	-0.894	1.00	31.52	A	O
ATOM	459	N	LYS	252	125.467	2.483	-1.507	1.00	30.25	A	N
ATOM	460	CA	LYS	252	124.277	3.337	-1.437	1.00	28.71	A	C

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ATOM	461	CB	LYS	252	124.649	4.819	-1.411	1.00	31.52	A	C
ATOM	462	CG	LYS	252	124.988	5.404	-0.046	1.00	34.79	A	C
ATOM	463	CD	LYS	252	125.183	6.925	-0.168	1.00	39.26	A	C
ATOM	464	CE	LYS	252	126.235	7.286	-1.247	1.00	41.56	A	C
ATOM	465	NZ	LYS	252	126.166	8.706	-1.738	1.00	40.74	A	N
ATOM	466	C	LYS	252	123.310	3.107	-2.590	1.00	26.67	A	C
ATOM	467	O	LYS	252	122.096	3.223	-2.409	1.00	25.86	A	O
ATOM	468	N	ALA	253	123.854	2.832	-3.777	1.00	24.31	A	N
ATOM	469	CA	ALA	253	123.055	2.590	-4.976	1.00	23.26	A	C
ATOM	470	CB	ALA	253	123.836	2.971	-6.210	1.00	21.44	A	C
ATOM	471	C	ALA	253	122.562	1.141	-5.083	1.00	23.62	A	C
ATOM	472	O	ALA	253	121.440	0.889	-5.542	1.00	23.36	A	O
ATOM	473	N	GLU	254	123.384	0.194	-4.637	1.00	23.00	A	N
ATOM	474	CA	GLU	254	123.010	-1.214	-4.681	1.00	22.66	A	C
ATOM	475	CB	GLU	254	124.163	-2.096	-4.209	1.00	23.98	A	C
ATOM	476	CG	GLU	254	123.930	-3.602	-4.364	1.00	26.66	A	C
ATOM	477	CD	GLU	254	124.986	-4.428	-3.645	1.00	30.11	A	C
ATOM	478	OE1	GLU	254	124.686	-4.926	-2.545	1.00	31.26	A	O
ATOM	479	OE2	GLU	254	126.120	-4.566	-4.158	1.00	31.27	A	O
ATOM	480	C	GLU	254	121.814	-1.445	-3.781	1.00	21.79	A	C
ATOM	481	O	GLU	254	120.880	-2.170	-4.140	1.00	20.60	A	O
ATOM	482	N	GLU	255	121.853	-0.833	-2.600	1.00	20.08	A	N
ATOM	483	CA	GLU	255	120.769	-0.991	-1.650	1.00	18.49	A	C
ATOM	484	CB	GLU	255	121.042	-0.254	-0.333	1.00	17.15	A	C
ATOM	485	CG	GLU	255	119.898	-0.429	0.662	1.00	22.04	A	C
ATOM	486	CD	GLU	255	120.141	0.177	2.038	1.00	25.76	A	C
ATOM	487	OE1	GLU	255	119.560	-0.356	3.010	1.00	25.80	A	O
ATOM	488	OE2	GLU	255	120.886	1.180	2.160	1.00	28.47	A	O
ATOM	489	C	GLU	255	119.477	-0.512	-2.285	1.00	17.95	A	C
ATOM	490	O	GLU	255	118.449	-1.173	-2.168	1.00	18.14	A	O
ATOM	491	N	VAL	256	119.554	0.592	-3.025	1.00	16.92	A	N
ATOM	492	CA	VAL	256	118.380	1.157	-3.680	1.00	14.86	A	C
ATOM	493	CB	VAL	256	118.665	2.567	-4.168	1.00	13.99	A	C
ATOM	494	CG1	VAL	256	117.457	3.139	-4.870	1.00	15.69	A	C
ATOM	495	CG2	VAL	256	119.022	3.422	-2.990	1.00	15.03	A	C
ATOM	496	C	VAL	256	117.934	0.266	-4.827	1.00	13.98	A	C
ATOM	497	O	VAL	256	116.753	0.240	-5.189	1.00	13.86	A	O
ATOM	498	N	ALA	257	118.882	-0.489	-5.371	1.00	12.74	A	N
ATOM	499	CA	ALA	257	118.599	-1.419	-6.454	1.00	11.40	A	C
ATOM	500	CB	ALA	257	119.893	-1.904	-7.096	1.00	11.20	A	C
ATOM	501	C	ALA	257	117.810	-2.604	-5.916	1.00	9.94	A	C
ATOM	502	O	ALA	257	116.835	-3.008	-6.513	1.00	9.43	A	O
ATOM	503	N	THR	258	118.222	-3.136	-4.771	1.00	10.79	A	N
ATOM	504	CA	THR	258	117.548	-4.287	-4.180	1.00	12.66	A	C
ATOM	505	CB	THR	258	118.202	-4.712	-2.847	1.00	13.83	A	C
ATOM	506	OG1	THR	258	118.047	-3.676	-1.877	1.00	13.33	A	O
ATOM	507	CG2	THR	258	119.679	-4.988	-3.051	1.00	13.94	A	C
ATOM	508	C	THR	258	116.072	-4.013	-3.953	1.00	13.04	A	C
ATOM	509	O	THR	258	115.221	-4.868	-4.219	1.00	13.05	A	O
ATOM	510	N	PHE	259	115.778	-2.796	-3.507	1.00	13.74	A	N
ATOM	511	CA	PHE	259	114.412	-2.373	-3.248	1.00	15.88	A	C
ATOM	512	CB	PHE	259	114.372	-0.909	-2.810	1.00	17.35	A	C
ATOM	513	CG	PHE	259	114.958	-0.668	-1.447	1.00	21.75	A	C
ATOM	514	CD1	PHE	259	114.928	-1.662	-0.470	1.00	23.11	A	C
ATOM	515	CD2	PHE	259	115.549	0.552	-1.135	1.00	23.67	A	C
ATOM	516	CE1	PHE	259	115.480	-1.440	0.790	1.00	24.92	A	C
ATOM	517	CE2	PHE	259	116.102	0.779	0.122	1.00	23.45	A	C
ATOM	518	CZ	PHE	259	116.069	-0.213	1.082	1.00	23.68	A	C
ATOM	519	C	PHE	259	113.538	-2.565	-4.473	1.00	16.05	A	C
ATOM	520	O	PHE	259	112.427	-3.087	-4.373	1.00	16.73	A	O
ATOM	521	N	PHE	260	114.049	-2.139	-5.626	1.00	15.24	A	N
ATOM	522	CA	PHE	260	113.324	-2.264	-6.879	1.00	13.91	A	C
ATOM	523	CB	PHE	260	114.035	-1.476	-7.978	1.00	13.57	A	C



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ATOM	524	CG	PHE	260	113.257	-1.383	-9.256	1.00	13.04	A	C
ATOM	525	CD1	PHE	260	112.276	-0.426	-9.413	1.00	13.48	A	C
ATOM	526	CD2	PHE	260	113.483	-2.278	-10.288	1.00	13.26	A	C
ATOM	527	CE1	PHE	260	111.531	-0.363	-10.571	1.00	14.35	A	C
ATOM	528	CE2	PHE	260	112.747	-2.222	-11.444	1.00	12.18	A	C
ATOM	529	CZ	PHE	260	111.768	-1.264	-11.587	1.00	14.25	A	C
ATOM	530	C	PHE	260	113.193	-3.729	-7.274	1.00	13.54	A	C
ATOM	531	O	PHE	260	112.102	-4.200	-7.543	1.00	13.39	A	O
ATOM	532	N	ALA	261	114.306	-4.450	-7.231	1.00	15.94	A	N
ATOM	533	CA	ALA	261	114.362	-5.866	-7.587	1.00	18.80	A	C
ATOM	534	CB	ALA	261	115.745	-6.412	-7.315	1.00	18.57	A	C
ATOM	535	C	ALA	261	113.320	-6.714	-6.876	1.00	21.31	A	C
ATOM	536	O	ALA	261	112.758	-7.641	-7.467	1.00	21.01	A	O
ATOM	537	N	LYS	262	113.073	-6.396	-5.609	1.00	23.97	A	N
ATOM	538	CA	LYS	262	112.086	-7.121	-4.826	1.00	26.60	A	C
ATOM	539	CB	LYS	262	112.212	-6.797	-3.339	1.00	28.92	A	C
ATOM	540	CG	LYS	262	113.470	-7.328	-2.691	1.00	33.22	A	C
ATOM	541	CD	LYS	262	113.575	-6.827	-1.262	1.00	37.92	A	C
ATOM	542	CE	LYS	262	114.883	-7.279	-0.625	1.00	40.20	A	C
ATOM	543	NZ	LYS	262	115.027	-6.708	0.744	1.00	41.62	A	N
ATOM	544	C	LYS	262	110.686	-6.795	-5.293	1.00	26.98	A	C
ATOM	545	O	LYS	262	109.869	-7.694	-5.440	1.00	28.37	A	O
ATOM	546	N	MET	263	110.416	-5.515	-5.546	1.00	28.61	A	N
ATOM	547	CA	MET	263	109.089	-5.073	-5.995	1.00	30.30	A	C
ATOM	548	CB	MET	263	108.929	-3.571	-5.797	1.00	30.58	A	C
ATOM	549	CG	MET	263	108.808	-3.166	-4.361	1.00	33.95	A	C
ATOM	550	SD	MET	263	108.669	-1.389	-4.216	1.00	40.56	A	S
ATOM	551	CE	MET	263	108.405	-1.194	-2.422	1.00	38.11	A	C
ATOM	552	C	MET	263	108.780	-5.408	-7.442	1.00	30.21	A	C
ATOM	553	O	MET	263	107.656	-5.231	-7.893	1.00	30.50	A	O
ATOM	554	N	LEU	264	109.766	-5.974	-8.125	1.00	30.29	A	N
ATOM	555	CA	LEU	264	109.685	-6.316	-9.533	1.00	31.05	A	C
ATOM	556	CB	LEU	264	111.044	-6.832	-9.990	1.00	29.24	A	C
ATOM	557	CG	LEU	264	111.307	-6.800	-11.489	1.00	29.26	A	C
ATOM	558	CD1	LEU	264	111.149	-5.379	-12.018	1.00	29.29	A	C
ATOM	559	CD2	LEU	264	112.700	-7.336	-11.746	1.00	30.09	A	C
ATOM	560	C	LEU	264	108.568	-7.234	-10.049	1.00	33.13	A	C
ATOM	561	O	LEU	264	108.398	-7.369	-11.264	1.00	34.42	A	O
ATOM	562	N	ASP	265	107.793	-7.857	-9.173	1.00	34.35	A	N
ATOM	563	CA	ASP	265	106.733	-8.722	-9.676	1.00	36.80	A	C
ATOM	564	CB	ASP	265	106.390	-9.819	-8.676	1.00	39.24	A	C
ATOM	565	CG	ASP	265	107.513	-10.807	-8.498	1.00	42.27	A	C
ATOM	566	OD1	ASP	265	107.724	-11.240	-7.347	1.00	43.24	A	O
ATOM	567	OD2	ASP	265	108.185	-11.142	-9.503	1.00	43.02	A	O
ATOM	568	C	ASP	265	105.473	-7.961	-10.018	1.00	37.51	A	C
ATOM	569	O	ASP	265	104.724	-8.358	-10.904	1.00	39.07	A	O
ATOM	570	N	HIS	266	105.271	-6.842	-9.340	1.00	38.46	A	N
ATOM	571	CA	HIS	266	104.082	-6.024	-9.520	1.00	40.32	A	C
ATOM	572	CB	HIS	266	103.972	-5.078	-8.345	1.00	40.02	A	C
ATOM	573	CG	HIS	266	103.933	-5.782	-7.031	1.00	40.62	A	C
ATOM	574	CD2	HIS	266	103.088	-6.724	-6.551	1.00	40.38	A	C
ATOM	575	ND1	HIS	266	104.864	-5.557	-6.041	1.00	41.14	A	N
ATOM	576	CE1	HIS	266	104.592	-6.329	-5.005	1.00	40.60	A	C
ATOM	577	NE2	HIS	266	103.520	-7.046	-5.288	1.00	42.15	A	N
ATOM	578	C	HIS	266	103.901	-5.239	-10.809	1.00	41.66	A	C
ATOM	579	O	HIS	266	104.874	-4.866	-11.456	1.00	41.91	A	O
ATOM	580	N	GLU	267	102.637	-5.006	-11.177	1.00	43.87	A	N
ATOM	581	CA	GLU	267	102.307	-4.236	-12.367	1.00	45.52	A	C
ATOM	582	CB	GLU	267	100.802	-4.285	-12.693	1.00	48.63	A	C
ATOM	583	CG	GLU	267	100.481	-5.011	-14.010	1.00	53.78	A	C
ATOM	584	CD	GLU	267	100.767	-6.517	-13.954	1.00	57.25	A	C
ATOM	585	OE1	GLU	267	99.923	-7.256	-13.397	1.00	58.54	A	O
ATOM	586	OE2	GLU	267	101.823	-6.966	-14.469	1.00	57.83	A	O

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ATOM	587	C	GLU	267	102.793	-2.817	-12.077	1.00	44.29	A	C
ATOM	588	O	GLU	267	103.324	-2.148	-12.960	1.00	45.66	A	O
ATOM	589	N	TYR	268	102.643	-2.357	-10.837	1.00	41.63	A	N
ATOM	590	CA	TYR	268	103.207	-1.065	-10.527	1.00	40.12	A	C
ATOM	591	CB	TYR	268	102.848	-0.583	-9.105	1.00	42.55	A	C
ATOM	592	CG	TYR	268	103.578	-1.191	-7.916	1.00	44.82	A	C
ATOM	593	CD1	TYR	268	102.858	-1.851	-6.911	1.00	45.23	A	C
ATOM	594	CE1	TYR	268	103.495	-2.344	-5.780	1.00	46.91	A	C
ATOM	595	CD2	TYR	268	104.967	-1.042	-7.754	1.00	46.23	A	C
ATOM	596	CE2	TYR	268	105.617	-1.533	-6.629	1.00	46.87	A	C
ATOM	597	CZ	TYR	268	104.875	-2.181	-5.648	1.00	47.45	A	C
ATOM	598	OH	TYR	268	105.516	-2.667	-4.534	1.00	49.13	A	O
ATOM	599	C	TYR	268	104.689	-1.431	-10.692	1.00	38.09	A	C
ATOM	600	O	TYR	268	105.084	-2.560	-10.400	1.00	40.45	A	O
ATOM	601	N	THR	269	105.452	-0.524	-11.272	1.00	33.87	A	N
ATOM	602	CA	THR	269	106.880	-0.673	-11.589	1.00	30.20	A	C
ATOM	603	CB	THR	269	107.679	-1.920	-11.055	1.00	27.35	A	C
ATOM	604	OG1	THR	269	107.190	-3.137	-11.661	1.00	24.01	A	O
ATOM	605	CG2	THR	269	107.699	-2.012	-9.548	1.00	27.10	A	C
ATOM	606	C	THR	269	106.966	-0.669	-13.104	1.00	29.15	A	C
ATOM	607	O	THR	269	108.054	-0.657	-13.661	1.00	30.78	A	O
ATOM	608	N	THR	270	105.828	-0.861	-13.762	1.00	26.82	A	N
ATOM	609	CA	THR	270	105.828	-0.729	-15.217	1.00	24.79	A	C
ATOM	610	CB	THR	270	105.090	-1.847	-15.990	1.00	23.39	A	C
ATOM	611	OG1	THR	270	104.060	-2.418	-15.192	1.00	24.54	A	O
ATOM	612	CG2	THR	270	106.056	-2.917	-16.436	1.00	21.91	A	C
ATOM	613	C	THR	270	105.152	0.611	-15.470	1.00	24.42	A	C
ATOM	614	O	THR	270	105.121	1.087	-16.598	1.00	25.74	A	O
ATOM	615	N	LYS	271	104.687	1.237	-14.381	1.00	23.84	A	N
ATOM	616	CA	LYS	271	104.016	2.531	-14.406	1.00	22.62	A	C
ATOM	617	CB	LYS	271	103.220	2.735	-13.115	1.00	23.03	A	C
ATOM	618	CG	LYS	271	101.927	1.962	-13.046	1.00	23.36	A	C
ATOM	619	CD	LYS	271	101.030	2.514	-11.960	1.00	25.59	A	C
ATOM	620	CE	LYS	271	99.700	1.764	-11.899	1.00	29.27	A	C
ATOM	621	NZ	LYS	271	98.739	2.365	-10.904	1.00	31.08	A	N
ATOM	622	C	LYS	271	104.951	3.717	-14.600	1.00	22.36	A	C
ATOM	623	O	LYS	271	106.018	3.784	-14.003	1.00	22.21	A	O
ATOM	624	N	GLU	272	104.517	4.680	-15.400	1.00	23.71	A	N
ATOM	625	CA	GLU	272	105.306	5.882	-15.671	1.00	25.92	A	C
ATOM	626	CB	GLU	272	104.472	6.913	-16.445	1.00	30.05	A	C
ATOM	627	CG	GLU	272	104.769	7.039	-17.935	1.00	35.16	A	C
ATOM	628	CD	GLU	272	105.999	7.882	-18.234	1.00	39.48	A	C
ATOM	629	OE1	GLU	272	106.675	8.314	-17.268	1.00	40.58	A	O
ATOM	630	OE2	GLU	272	106.286	8.108	-19.441	1.00	41.48	A	O
ATOM	631	C	GLU	272	105.855	6.563	-14.419	1.00	24.14	A	C
ATOM	632	O	GLU	272	107.061	6.545	-14.189	1.00	23.66	A	O
ATOM	633	N	ILE	273	104.960	7.127	-13.601	1.00	21.88	A	N
ATOM	634	CA	ILE	273	105.353	7.861	-12.393	1.00	19.31	A	C
ATOM	635	CB	ILE	273	104.153	8.309	-11.517	1.00	20.43	A	C
ATOM	636	CG2	ILE	273	104.590	9.392	-10.564	1.00	20.10	A	C
ATOM	637	CG1	ILE	273	103.012	8.853	-12.370	1.00	21.59	A	C
ATOM	638	CD1	ILE	273	102.083	7.763	-12.916	1.00	25.98	A	C
ATOM	639	C	ILE	273	106.303	7.090	-11.499	1.00	16.32	A	C
ATOM	640	O	ILE	273	107.347	7.614	-11.114	1.00	15.09	A	O
ATOM	641	N	PHE	274	105.940	5.850	-11.177	1.00	13.34	A	N
ATOM	642	CA	PHE	274	106.778	5.025	-10.323	1.00	11.64	A	C
ATOM	643	CB	PHE	274	106.195	3.629	-10.135	1.00	10.11	A	C
ATOM	644	CG	PHE	274	107.045	2.724	-9.277	1.00	7.25	A	C
ATOM	645	CD1	PHE	274	106.725	2.503	-7.945	1.00	7.31	A	C
ATOM	646	CD2	PHE	274	108.161	2.091	-9.803	1.00	6.02	A	C
ATOM	647	CE1	PHE	274	107.502	1.672	-7.153	1.00	5.35	A	C
ATOM	648	CE2	PHE	274	108.938	1.264	-9.021	1.00	4.50	A	C
ATOM	649	CZ	PHE	274	108.606	1.055	-7.693	1.00	4.59	A	C

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ATOM	650	C	PHE	274	108.190	4.914	-10.857	1.00	11.32	A	C
ATOM	651	O	PHE	274	109.139	5.108	-10.108	1.00	11.87	A	O
ATOM	652	N	ARG	275	108.334	4.593	-12.140	1.00	11.50	A	N
ATOM	653	CA	ARG	275	109.668	4.460	-12.722	1.00	12.71	A	C
ATOM	654	CB	ARG	275	109.625	3.805	-14.107	1.00	11.71	A	C
ATOM	655	CG	ARG	275	109.176	2.358	-14.054	1.00	12.80	A	C
ATOM	656	CD	ARG	275	108.792	1.816	-15.406	1.00	12.85	A	C
ATOM	657	NE	ARG	275	109.930	1.378	-16.199	1.00	15.24	A	N
ATOM	658	CZ	ARG	275	110.496	0.176	-16.104	1.00	16.84	A	C
ATOM	659	NH1	ARG	275	110.052	-0.718	-15.240	1.00	15.84	A	N
ATOM	660	NH2	ARG	275	111.471	-0.162	-16.930	1.00	20.09	A	N
ATOM	661	C	ARG	275	110.408	5.782	-12.771	1.00	13.22	A	C
ATOM	662	O	ARG	275	111.609	5.818	-12.527	1.00	13.98	A	O
ATOM	663	N	LYS	276	109.684	6.867	-13.036	1.00	13.91	A	N
ATOM	664	CA	LYS	276	110.292	8.195	-13.108	1.00	15.07	A	C
ATOM	665	CB	LYS	276	109.269	9.244	-13.545	1.00	18.24	A	C
ATOM	666	CG	LYS	276	109.839	10.640	-13.701	1.00	22.87	A	C
ATOM	667	CD	LYS	276	108.748	11.671	-13.629	1.00	29.21	A	C
ATOM	668	CE	LYS	276	108.057	11.635	-12.256	1.00	34.57	A	C
ATOM	669	NZ	LYS	276	106.887	12.582	-12.146	1.00	37.04	A	N
ATOM	670	C	LYS	276	110.841	8.574	-11.747	1.00	13.92	A	C
ATOM	671	O	LYS	276	112.013	8.941	-11.616	1.00	11.59	A	O
ATOM	672	N	ASN	277	109.979	8.473	-10.739	1.00	13.35	A	N
ATOM	673	CA	ASN	277	110.361	8.797	-9.379	1.00	13.28	A	C
ATOM	674	CB	ASN	277	109.176	8.638	-8.446	1.00	12.97	A	C
ATOM	675	CG	ASN	277	108.147	9.742	-8.624	1.00	15.78	A	C
ATOM	676	OD1	ASN	277	106.948	9.496	-8.524	1.00	18.90	A	O
ATOM	677	ND2	ASN	277	108.610	10.967	-8.871	1.00	13.10	A	N
ATOM	678	C	ASN	277	111.525	7.948	-8.908	1.00	13.62	A	C
ATOM	679	O	ASN	277	112.584	8.484	-8.557	1.00	12.86	A	O
ATOM	680	N	PHE	278	111.350	6.627	-8.977	1.00	13.59	A	N
ATOM	681	CA	PHE	278	112.384	5.690	-8.560	1.00	12.91	A	C
ATOM	682	CB	PHE	278	112.050	4.257	-8.968	1.00	10.53	A	C
ATOM	683	CG	PHE	278	113.172	3.292	-8.712	1.00	8.84	A	C
ATOM	684	CD1	PHE	278	113.463	2.881	-7.426	1.00	8.46	A	C
ATOM	685	CD2	PHE	278	114.003	2.882	-9.746	1.00	7.84	A	C
ATOM	686	CE1	PHE	278	114.572	2.086	-7.176	1.00	8.64	A	C
ATOM	687	CE2	PHE	278	115.109	2.090	-9.505	1.00	6.79	A	C
ATOM	688	CZ	PHE	278	115.399	1.692	-8.221	1.00	7.24	A	C
ATOM	689	C	PHE	278	113.744	6.038	-9.125	1.00	14.95	A	C
ATOM	690	O	PHE	278	114.722	6.086	-8.391	1.00	17.38	A	O
ATOM	691	N	PHE	279	113.797	6.294	-10.427	1.00	15.76	A	N
ATOM	692	CA	PHE	279	115.052	6.609	-11.092	1.00	16.66	A	C
ATOM	693	CB	PHE	279	114.856	6.626	-12.598	1.00	15.68	A	C
ATOM	694	CG	PHE	279	116.132	6.535	-13.362	1.00	16.12	A	C
ATOM	695	CD1	PHE	279	116.927	5.397	-13.268	1.00	17.65	A	C
ATOM	696	CD2	PHE	279	116.539	7.571	-14.183	1.00	14.73	A	C
ATOM	697	CE1	PHE	279	118.108	5.295	-13.981	1.00	18.38	A	C
ATOM	698	CE2	PHE	279	117.715	7.483	-14.902	1.00	15.17	A	C
ATOM	699	CZ	PHE	279	118.505	6.345	-14.803	1.00	18.63	A	C
ATOM	700	C	PHE	279	115.699	7.915	-10.659	1.00	18.53	A	C
ATOM	701	O	PHE	279	116.924	8.015	-10.613	1.00	18.73	A	O
ATOM	702	N	LYS	280	114.881	8.927	-10.388	1.00	20.04	A	N
ATOM	703	CA	LYS	280	115.403	10.216	-9.970	1.00	20.86	A	C
ATOM	704	CB	LYS	280	114.277	11.258	-9.910	1.00	22.48	A	C
ATOM	705	CG	LYS	280	114.736	12.707	-9.708	1.00	24.40	A	C
ATOM	706	CD	LYS	280	113.556	13.694	-9.830	1.00	28.40	A	C
ATOM	707	CE	LYS	280	113.959	15.180	-9.644	1.00	29.18	A	C
ATOM	708	NZ	LYS	280	114.289	15.552	-8.225	1.00	29.76	A	N
ATOM	709	C	LYS	280	116.040	10.019	-8.607	1.00	20.72	A	C
ATOM	710	O	LYS	280	117.140	10.486	-8.363	1.00	21.61	A	O
ATOM	711	N	ASP	281	115.378	9.255	-7.745	1.00	21.36	A	N
ATOM	712	CA	ASP	281	115.898	9.001	-6.408	1.00	22.24	A	C

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ATOM	713	CB	ASP	281	114.782	8.509	-5.463	1.00	24.06	A	C
ATOM	714	CG	ASP	281	113.960	9.665	-4.862	1.00	27.47	A	C
ATOM	715	OD1	ASP	281	113.210	9.435	-3.888	1.00	29.31	A	O
ATOM	716	OD2	ASP	281	114.075	10.816	-5.342	1.00	28.00	A	O
ATOM	717	C	ASP	281	117.081	8.039	-6.410	1.00	21.64	A	C
ATOM	718	O	ASP	281	117.915	8.078	-5.510	1.00	23.42	A	O
ATOM	719	N	TRP	282	117.164	7.186	-7.426	1.00	19.75	A	N
ATOM	720	CA	TRP	282	118.261	6.239	-7.515	1.00	17.24	A	C
ATOM	721	CB	TRP	282	117.972	5.147	-8.549	1.00	15.70	A	C
ATOM	722	CG	TRP	282	118.948	4.031	-8.466	1.00	15.15	A	C
ATOM	723	CD2	TRP	282	119.216	3.044	-9.460	1.00	15.89	A	C
ATOM	724	CE2	TRP	282	120.164	2.151	-8.914	1.00	17.32	A	C
ATOM	725	CE3	TRP	282	118.744	2.816	-10.757	1.00	17.76	A	C
ATOM	726	CD1	TRP	282	119.732	3.717	-7.397	1.00	16.48	A	C
ATOM	727	NE1	TRP	282	120.462	2.592	-7.654	1.00	17.26	A	N
ATOM	728	CZ2	TRP	282	120.648	1.042	-9.619	1.00	16.48	A	C
ATOM	729	CZ3	TRP	282	119.227	1.710	-11.462	1.00	18.49	A	C
ATOM	730	CH2	TRP	282	120.168	0.839	-10.887	1.00	17.43	A	C
ATOM	731	C	TRP	282	119.550	6.968	-7.876	1.00	16.60	A	C
ATOM	732	O	TRP	282	120.576	6.788	-7.230	1.00	15.94	A	O
ATOM	733	N	ARG	283	119.481	7.799	-8.908	1.00	16.82	A	N
ATOM	734	CA	ARG	283	120.632	8.562	-9.366	1.00	17.12	A	C
ATOM	735	CB	ARG	283	120.252	9.482	-10.529	1.00	14.69	A	C
ATOM	736	CG	ARG	283	120.017	8.764	-11.848	1.00	12.94	A	C
ATOM	737	CD	ARG	283	119.724	9.748	-12.974	1.00	10.96	A	C
ATOM	738	NE	ARG	283	120.878	10.592	-13.293	1.00	11.57	A	N
ATOM	739	CZ	ARG	283	121.898	10.225	-14.070	1.00	9.54	A	C
ATOM	740	NH1	ARG	283	121.926	9.021	-14.623	1.00	9.90	A	N
ATOM	741	NH2	ARG	283	122.910	11.053	-14.273	1.00	5.90	A	N
ATOM	742	C	ARG	283	121.247	9.384	-8.254	1.00	19.00	A	C
ATOM	743	O	ARG	283	122.461	9.529	-8.190	1.00	20.84	A	O
ATOM	744	N	LYS	284	120.416	9.924	-7.374	1.00	21.71	A	N
ATOM	745	CA	LYS	284	120.920	10.735	-6.276	1.00	25.06	A	C
ATOM	746	CB	LYS	284	119.778	11.231	-5.392	1.00	26.39	A	C
ATOM	747	CG	LYS	284	119.683	12.745	-5.348	1.00	28.62	A	C
ATOM	748	CD	LYS	284	119.033	13.304	-6.597	1.00	28.96	A	C
ATOM	749	CE	LYS	284	117.552	13.037	-6.555	1.00	30.90	A	C
ATOM	750	NZ	LYS	284	116.976	13.439	-5.235	1.00	32.05	A	N
ATOM	751	C	LYS	284	121.917	9.946	-5.453	1.00	26.37	A	C
ATOM	752	O	LYS	284	123.031	10.404	-5.209	1.00	28.23	A	O
ATOM	753	N	GLU	285	121.539	8.717	-5.126	1.00	28.20	A	N
ATOM	754	CA	GLU	285	122.366	7.817	-4.337	1.00	31.03	A	C
ATOM	755	CB	GLU	285	121.487	6.687	-3.789	1.00	33.99	A	C
ATOM	756	CG	GLU	285	121.546	6.519	-2.275	1.00	39.91	A	C
ATOM	757	CD	GLU	285	120.985	7.713	-1.512	1.00	44.01	A	C
ATOM	758	OE1	GLU	285	119.863	8.160	-1.836	1.00	46.32	A	O
ATOM	759	OE2	GLU	285	121.662	8.199	-0.576	1.00	45.32	A	O
ATOM	760	C	GLU	285	123.581	7.238	-5.096	1.00	30.35	A	C
ATOM	761	O	GLU	285	124.420	6.559	-4.509	1.00	30.54	A	O
ATOM	762	N	MET	286	123.675	7.516	-6.391	1.00	30.36	A	N
ATOM	763	CA	MET	286	124.771	7.011	-7.217	1.00	31.23	A	C
ATOM	764	CB	MET	286	124.354	6.957	-8.688	1.00	30.67	A	C
ATOM	765	CG	MET	286	123.291	5.943	-9.040	1.00	32.20	A	C
ATOM	766	SD	MET	286	123.038	5.850	-10.824	1.00	32.08	A	S
ATOM	767	CE	MET	286	121.385	5.264	-10.895	1.00	33.39	A	C
ATOM	768	C	MET	286	126.038	7.847	-7.120	1.00	32.70	A	C
ATOM	769	O	MET	286	126.034	8.949	-6.568	1.00	34.39	A	O
ATOM	770	N	THR	287	127.117	7.318	-7.689	1.00	33.69	A	N
ATOM	771	CA	THR	287	128.410	7.994	-7.712	1.00	34.93	A	C
ATOM	772	CB	THR	287	129.576	6.970	-7.565	1.00	35.43	A	C
ATOM	773	OG1	THR	287	129.700	6.185	-8.755	1.00	33.71	A	O
ATOM	774	CG2	THR	287	129.306	6.024	-6.397	1.00	35.09	A	C
ATOM	775	C	THR	287	128.504	8.706	-9.063	1.00	36.25	A	C

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ATOM	776	O	THR	287	127.654	8.495	-9.926	1.00	36.19	A	O
ATOM	777	N	ASN	288	129.515	9.549	-9.257	1.00	37.37	A	N
ATOM	778	CA	ASN	288	129.648	10.245	-10.536	1.00	38.03	A	C
ATOM	779	CB	ASN	288	130.710	11.340	-10.472	1.00	39.04	A	C
ATOM	780	CG	ASN	288	130.133	12.681	-10.050	1.00	40.81	A	C
ATOM	781	OD1	ASN	288	130.827	13.523	-9.469	1.00	41.39	A	O
ATOM	782	ND2	ASN	288	128.855	12.890	-10.349	1.00	40.90	A	N
ATOM	783	C	ASN	288	129.928	9.279	-11.678	1.00	38.21	A	C
ATOM	784	O	ASN	288	129.444	9.467	-12.792	1.00	38.72	A	O
ATOM	785	N	GLU	289	130.676	8.223	-11.383	1.00	37.92	A	N
ATOM	786	CA	GLU	289	130.988	7.208	-12.374	1.00	37.73	A	C
ATOM	787	CB	GLU	289	131.884	6.149	-11.748	1.00	41.10	A	C
ATOM	788	CG	GLU	289	132.277	5.018	-12.680	1.00	45.81	A	C
ATOM	789	CD	GLU	289	132.565	3.728	-11.932	1.00	47.81	A	C
ATOM	790	OE1	GLU	289	133.719	3.527	-11.487	1.00	48.42	A	O
ATOM	791	OE2	GLU	289	131.620	2.920	-11.783	1.00	49.49	A	O
ATOM	792	C	GLU	289	129.680	6.559	-12.826	1.00	37.17	A	C
ATOM	793	O	GLU	289	129.389	6.485	-14.020	1.00	37.89	A	O
ATOM	794	N	GLU	290	128.875	6.136	-11.855	1.00	35.50	A	N
ATOM	795	CA	GLU	290	127.596	5.487	-12.126	1.00	33.44	A	C
ATOM	796	CB	GLU	290	127.004	4.951	-10.827	1.00	33.24	A	C
ATOM	797	CG	GLU	290	127.759	3.752	-10.282	1.00	36.90	A	C
ATOM	798	CD	GLU	290	127.438	3.445	-8.827	1.00	38.86	A	C
ATOM	799	OE1	GLU	290	127.672	2.290	-8.403	1.00	39.06	A	O
ATOM	800	OE2	GLU	290	126.969	4.352	-8.104	1.00	39.28	A	O
ATOM	801	C	GLU	290	126.569	6.350	-12.861	1.00	32.08	A	C
ATOM	802	O	GLU	290	125.946	5.888	-13.820	1.00	32.29	A	O
ATOM	803	N	LYS	291	126.408	7.600	-12.427	1.00	29.59	A	N
ATOM	804	CA	LYS	291	125.451	8.515	-13.045	1.00	26.80	A	C
ATOM	805	CB	LYS	291	125.384	9.837	-12.278	1.00	26.63	A	C
ATOM	806	CG	LYS	291	125.018	9.689	-10.811	1.00	28.81	A	C
ATOM	807	CD	LYS	291	124.476	10.972	-10.170	1.00	28.39	A	C
ATOM	808	CE	LYS	291	125.501	12.079	-10.112	1.00	30.05	A	C
ATOM	809	NZ	LYS	291	124.920	13.327	-9.528	1.00	30.79	A	N
ATOM	810	C	LYS	291	125.797	8.794	-14.497	1.00	25.80	A	C
ATOM	811	O	LYS	291	124.946	9.206	-15.277	1.00	26.55	A	O
ATOM	812	N	ASN	292	127.056	8.581	-14.855	1.00	24.72	A	N
ATOM	813	CA	ASN	292	127.505	8.818	-16.218	1.00	23.89	A	C
ATOM	814	CB	ASN	292	129.004	9.124	-16.251	1.00	24.28	A	C
ATOM	815	CG	ASN	292	129.351	10.440	-15.589	1.00	24.79	A	C
ATOM	816	OD1	ASN	292	128.468	11.206	-15.193	1.00	25.07	A	O
ATOM	817	ND2	ASN	292	130.649	10.716	-15.471	1.00	22.97	A	N
ATOM	818	C	ASN	292	127.221	7.638	-17.126	1.00	23.02	A	C
ATOM	819	O	ASN	292	126.906	7.826	-18.295	1.00	23.16	A	O
ATOM	820	N	ILE	293	127.374	6.426	-16.597	1.00	22.44	A	N
ATOM	821	CA	ILE	293	127.139	5.209	-17.367	1.00	21.17	A	C
ATOM	822	CB	ILE	293	127.841	4.000	-16.735	1.00	19.58	A	C
ATOM	823	CG2	ILE	293	127.533	2.725	-17.533	1.00	18.01	A	C
ATOM	824	CG1	ILE	293	129.338	4.258	-16.633	1.00	16.72	A	C
ATOM	825	CD1	ILE	293	130.046	3.227	-15.825	1.00	16.60	A	C
ATOM	826	C	ILE	293	125.655	4.890	-17.429	1.00	22.80	A	C
ATOM	827	O	ILE	293	125.116	4.609	-18.505	1.00	24.14	A	O
ATOM	828	N	ILE	294	125.012	4.896	-16.264	1.00	22.34	A	N
ATOM	829	CA	ILE	294	123.589	4.596	-16.162	1.00	22.38	A	C
ATOM	830	CB	ILE	294	123.239	4.048	-14.767	1.00	21.16	A	C
ATOM	831	CG2	ILE	294	121.741	3.882	-14.635	1.00	22.35	A	C
ATOM	832	CG1	ILE	294	123.953	2.714	-14.550	1.00	21.36	A	C
ATOM	833	CD1	ILE	294	123.740	2.096	-13.194	1.00	21.50	A	C
ATOM	834	C	ILE	294	122.731	5.815	-16.481	1.00	22.70	A	C
ATOM	835	O	ILE	294	122.584	6.724	-15.662	1.00	22.89	A	O
ATOM	836	N	THR	295	122.171	5.831	-17.682	1.00	22.92	A	N
ATOM	837	CA	THR	295	121.335	6.942	-18.106	1.00	22.71	A	C
ATOM	838	CB	THR	295	121.596	7.317	-19.553	1.00	22.47	A	C

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ATOM	839	OG1	THR	295	121.298	6.193	-20.395	1.00	21.19	A	O
ATOM	840	CG2	THR	295	123.042	7.737	-19.733	1.00	22.86	A	C
ATOM	841	C	THR	295	119.863	6.623	-17.993	1.00	23.08	A	C
ATOM	842	O	THR	295	119.045	7.530	-17.843	1.00	22.95	A	O
ATOM	843	N	ASN	296	119.520	5.341	-18.070	1.00	22.82	A	N
ATOM	844	CA	ASN	296	118.120	4.962	-18.006	1.00	24.09	A	C
ATOM	845	CB	ASN	296	117.526	4.879	-19.410	1.00	26.36	A	C
ATOM	846	CG	ASN	296	118.135	3.755	-20.233	1.00	29.23	A	C
ATOM	847	OD1	ASN	296	117.588	2.648	-20.305	1.00	29.86	A	O
ATOM	848	ND2	ASN	296	119.276	4.032	-20.852	1.00	30.53	A	N
ATOM	849	C	ASN	296	117.848	3.660	-17.295	1.00	24.18	A	C
ATOM	850	O	ASN	296	118.607	2.692	-17.394	1.00	23.53	A	O
ATOM	851	N	LEU	297	116.692	3.628	-16.651	1.00	23.99	A	N
ATOM	852	CA	LEU	297	116.243	2.462	-15.917	1.00	23.61	A	C
ATOM	853	CB	LEU	297	114.958	2.807	-15.168	1.00	20.25	A	C
ATOM	854	CG	LEU	297	114.349	1.720	-14.302	1.00	16.79	A	C
ATOM	855	CD1	LEU	297	115.278	1.479	-13.132	1.00	15.79	A	C
ATOM	856	CD2	LEU	297	112.955	2.133	-13.831	1.00	16.51	A	C
ATOM	857	C	LEU	297	115.979	1.295	-16.858	1.00	24.78	A	C
ATOM	858	O	LEU	297	116.088	0.137	-16.459	1.00	25.23	A	O
ATOM	859	N	SER	298	115.673	1.601	-18.115	1.00	26.23	A	N
ATOM	860	CA	SER	298	115.352	0.566	-19.087	1.00	29.41	A	C
ATOM	861	CB	SER	298	114.788	1.186	-20.352	1.00	29.42	A	C
ATOM	862	OG	SER	298	113.460	1.610	-20.117	1.00	32.13	A	O
ATOM	863	C	SER	298	116.435	-0.444	-19.421	1.00	31.23	A	C
ATOM	864	O	SER	298	116.136	-1.616	-19.664	1.00	32.12	A	O
ATOM	865	N	LYS	299	117.684	0.008	-19.438	1.00	32.66	A	N
ATOM	866	CA	LYS	299	118.810	-0.867	-19.734	1.00	33.28	A	C
ATOM	867	CB	LYS	299	119.914	-0.091	-20.449	1.00	33.83	A	C
ATOM	868	CG	LYS	299	119.625	0.218	-21.902	1.00	34.74	A	C
ATOM	869	CD	LYS	299	120.693	1.144	-22.464	1.00	37.06	A	C
ATOM	870	CE	LYS	299	120.584	1.297	-23.974	1.00	38.26	A	C
ATOM	871	NZ	LYS	299	120.919	0.026	-24.682	1.00	38.40	A	N
ATOM	872	C	LYS	299	119.362	-1.533	-18.474	1.00	34.07	A	C
ATOM	873	O	LYS	299	120.450	-2.115	-18.496	1.00	35.19	A	O
ATOM	874	N	CYS	300	118.629	-1.416	-17.369	1.00	34.46	A	N
ATOM	875	CA	CYS	300	119.033	-2.027	-16.109	1.00	35.38	A	C
ATOM	876	CB	CYS	300	118.592	-1.174	-14.924	1.00	34.34	A	C
ATOM	877	SG	CYS	300	119.376	0.441	-14.847	1.00	32.86	A	S
ATOM	878	C	CYS	300	118.360	-3.377	-16.021	1.00	37.50	A	C
ATOM	879	O	CYS	300	117.151	-3.478	-16.223	1.00	39.74	A	O
ATOM	880	N	ASP	301	119.137	-4.419	-15.747	1.00	38.24	A	N
ATOM	881	CA	ASP	301	118.581	-5.756	-15.636	1.00	39.19	A	C
ATOM	882	CB	ASP	301	119.302	-6.708	-16.582	1.00	41.18	A	C
ATOM	883	CG	ASP	301	118.693	-0.088	-16.582	1.00	42.72	A	C
ATOM	884	OD1	ASP	301	117.465	-8.191	-16.387	1.00	44.24	A	O
ATOM	885	OD2	ASP	301	119.440	-9.067	-16.776	1.00	43.90	A	O
ATOM	886	C	ASP	301	118.702	-6.260	-14.212	1.00	39.25	A	C
ATOM	887	O	ASP	301	119.803	-6.435	-13.711	1.00	41.31	A	O
ATOM	888	N	PHE	302	117.566	-6.518	-13.574	1.00	39.39	A	N
ATOM	889	CA	PHE	302	117.553	-6.997	-12.195	1.00	39.73	A	C
ATOM	890	CB	PHE	302	116.588	-6.152	-11.356	1.00	35.83	A	C
ATOM	891	CG	PHE	302	116.880	-4.677	-11.376	1.00	33.79	A	C
ATOM	892	CD1	PHE	302	117.813	-4.125	-10.509	1.00	32.58	A	C
ATOM	893	CD2	PHE	302	116.193	-3.829	-12.239	1.00	32.68	A	C
ATOM	894	CE1	PHE	302	118.053	-2.750	-10.501	1.00	30.53	A	C
ATOM	895	CE2	PHE	302	116.431	-2.452	-12.235	1.00	29.41	A	C
ATOM	896	CZ	PHE	302	117.358	-1.917	-11.366	1.00	29.38	A	C
ATOM	897	C	PHE	302	117.151	-8.478	-12.073	1.00	42.20	A	C
ATOM	898	O	PHE	302	116.882	-8.957	-10.969	1.00	43.41	A	O
ATOM	899	N	THR	303	117.138	-9.204	-13.192	1.00	43.94	A	N
ATOM	900	CA	THR	303	116.733	-10.617	-13.209	1.00	44.65	A	C
ATOM	901	CB	THR	303	116.742	-11.209	-14.645	1.00	47.02	A	C

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ATOM	902	OG1	THR	303	118.004	-10.945	-15.278	1.00	48.87	A	O
ATOM	903	CG2	THR	303	115.607	-10.622	-15.478	1.00	47.49	A	C
ATOM	904	C	THR	303	117.464	-11.588	-12.283	1.00	43.59	A	C
ATOM	905	O	THR	303	116.996	-12.705	-12.080	1.00	43.48	A	O
ATOM	906	N	GLN	304	118.626	-11.198	-11.770	1.00	42.55	A	N
ATOM	907	CA	GLN	304	119.364	-12.064	-10.859	1.00	41.46	A	C
ATOM	908	CB	GLN	304	120.844	-12.109	-11.214	1.00	41.39	A	C
ATOM	909	CG	GLN	304	121.163	-13.070	-12.331	1.00	40.83	A	C
ATOM	910	CD	GLN	304	122.627	-13.460	-12.365	1.00	42.96	A	C
ATOM	911	OE1	GLN	304	123.413	-13.107	-11.472	1.00	42.68	A	O
ATOM	912	NE2	GLN	304	123.005	-14.200	-13.399	1.00	43.91	A	N
ATOM	913	C	GLN	304	119.180	-11.651	-9.405	1.00	41.51	A	C
ATOM	914	O	GLN	304	119.101	-12.501	-8.524	1.00	41.66	A	O
ATOM	915	N	MET	305	119.137	-10.344	-9.156	1.00	40.99	A	N
ATOM	916	CA	MET	305	118.936	-9.822	-7.809	1.00	40.20	A	C
ATOM	917	CB	MET	305	119.069	-8.308	-7.794	1.00	37.33	A	C
ATOM	918	CG	MET	305	120.431	-7.760	-8.111	1.00	35.28	A	C
ATOM	919	SD	MET	305	120.355	-5.961	-8.082	1.00	30.98	A	S
ATOM	920	CE	MET	305	119.425	-5.724	-6.563	1.00	29.15	A	C
ATOM	921	C	MET	305	117.526	-10.170	-7.359	1.00	42.01	A	C
ATOM	922	O	MET	305	117.272	-10.333	-6.170	1.00	42.66	A	O
ATOM	923	N	SER	306	116.608	-10.242	-8.321	1.00	43.65	A	N
ATOM	924	CA	SER	306	115.217	-10.571	-8.048	1.00	45.46	A	C
ATOM	925	CB	SER	306	114.358	-10.340	-9.299	1.00	46.86	A	C
ATOM	926	OG	SER	306	112.974	-10.527	-9.030	1.00	48.52	A	O
ATOM	927	C	SER	306	115.102	-12.021	-7.585	1.00	46.31	A	C
ATOM	928	O	SER	306	114.440	-12.301	-6.589	1.00	47.72	A	O
ATOM	929	N	GLN	307	115.772	-12.934	-8.286	1.00	46.33	A	N
ATOM	930	CA	GLN	307	115.733	-14.353	-7.930	1.00	45.76	A	C
ATOM	931	CB	GLN	307	116.227	-15.215	-9.083	1.00	45.91	A	C
ATOM	932	CG	GLN	307	115.242	-15.337	-10.221	1.00	45.48	A	C
ATOM	933	CD	GLN	307	115.839	-16.071	-11.387	1.00	45.95	A	C
ATOM	934	OE1	GLN	307	116.472	-17.115	-11.218	1.00	46.81	A	O
ATOM	935	NE2	GLN	307	115.678	-15.516	-12.576	1.00	46.30	A	N
ATOM	936	C	GLN	307	116.508	-14.698	-6.666	1.00	45.38	A	C
ATOM	937	O	GLN	307	116.138	-15.616	-5.946	1.00	45.11	A	O
ATOM	938	N	TYR	308	117.598	-13.985	-6.410	1.00	45.32	A	N
ATOM	939	CA	TYR	308	118.387	-14.234	-5.211	1.00	45.09	A	C
ATOM	940	CB	TYR	308	119.604	-13.313	-5.152	1.00	45.29	A	C
ATOM	941	CG	TYR	308	120.333	-13.356	-3.830	1.00	45.30	A	C
ATOM	942	CD1	TYR	308	120.241	-12.299	-2.930	1.00	45.97	A	C
ATOM	943	CE1	TYR	308	120.932	-12.323	-1.717	1.00	47.25	A	C
ATOM	944	CD2	TYR	308	121.131	-14.447	-3.486	1.00	46.39	A	C
ATOM	945	CE2	TYR	308	121.827	-14.482	-2.275	1.00	46.37	A	C
ATOM	946	CZ	TYR	308	121.724	-13.417	-1.298	1.00	46.48	A	C
ATOM	947	OH	TYR	308	122.416	-13.435	-0.210	1.00	46.37	A	O
ATOM	948	C	TYR	308	117.526	-14.002	-3.982	1.00	44.90	A	C
ATOM	949	O	TYR	308	117.529	-14.816	-3.060	1.00	46.09	A	O
ATOM	950	N	PHE	309	116.790	-12.890	-3.977	1.00	43.32	A	N
ATOM	951	CA	PHE	309	115.927	-12.561	-2.854	1.00	42.14	A	C
ATOM	952	CB	PHE	309	115.457	-11.105	-2.914	1.00	40.09	A	C
ATOM	953	CG	PHE	309	116.559	-10.106	-2.643	1.00	37.90	A	C
ATOM	954	CD1	PHE	309	117.418	-10.273	-1.560	1.00	37.06	A	C
ATOM	955	CD2	PHE	309	116.765	-9.024	-3.489	1.00	36.43	A	C
ATOM	956	CE1	PHE	309	118.466	-9.381	-1.326	1.00	34.73	A	C
ATOM	957	CE2	PHE	309	117.807	-8.132	-3.262	1.00	35.35	A	C
ATOM	958	CZ	PHE	309	118.660	-8.315	-2.175	1.00	34.86	A	C
ATOM	959	C	PHE	309	114.767	-13.526	-2.748	1.00	43.00	A	C
ATOM	960	O	PHE	309	114.094	-13.567	-1.725	1.00	43.86	A	O
ATOM	961	N	LYS	310	114.553	-14.312	-3.806	1.00	44.68	A	N
ATOM	962	CA	LYS	310	113.503	-15.340	-3.839	1.00	45.42	A	C
ATOM	963	CB	LYS	310	113.162	-15.744	-5.276	1.00	44.64	A	C
ATOM	964	CG	LYS	310	112.527	-14.687	-6.140	1.00	43.40	A	C

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ATOM	965	CD	LYS	310	111.064	-14.557	-5.839	1.00	43.17	A	C
ATOM	966	CE	LYS	310	110.350	-13.866	-6.978	1.00	41.76	A	C
ATOM	967	NZ	LYS	310	108.916	-13.745	-6.654	1.00	41.92	A	N
ATOM	968	C	LYS	310	114.105	-16.559	-3.152	1.00	46.31	A	C
ATOM	969	O	LYS	310	113.403	-17.335	-2.518	1.00	46.78	A	O
ATOM	970	N	ALA	311	115.411	-16.737	-3.340	1.00	47.99	A	N
ATOM	971	CA	ALA	311	116.157	-17.847	-2.762	1.00	49.82	A	C
ATOM	972	CB	ALA	311	117.519	-17.955	-3.420	1.00	49.24	A	C
ATOM	973	C	ALA	311	116.317	-17.642	-1.268	1.00	51.53	A	C
ATOM	974	O	ALA	311	116.346	-18.603	-0.502	1.00	52.45	A	O
ATOM	975	N	GLN	312	116.439	-16.383	-0.861	1.00	53.50	A	N
ATOM	976	CA	GLN	312	116.584	-16.043	0.545	1.00	55.60	A	C
ATOM	977	CB	GLN	312	116.830	-14.544	0.705	1.00	58.27	A	C
ATOM	978	CG	GLN	312	118.091	-14.040	0.048	1.00	61.69	A	C
ATOM	979	CD	GLN	312	119.341	-14.586	0.698	1.00	64.34	A	C
ATOM	980	OE1	GLN	312	119.961	-13.922	1.533	1.00	65.76	A	O
ATOM	981	NE2	GLN	312	119.729	-15.797	0.311	1.00	65.30	A	N
ATOM	982	C	GLN	312	115.328	-16.432	1.313	1.00	55.77	A	C
ATOM	983	O	GLN	312	115.410	-16.906	2.437	1.00	55.34	A	O
ATOM	984	N	THR	313	114.169	-16.238	0.689	1.00	56.73	A	N
ATOM	985	CA	THR	313	112.883	-16.557	1.308	1.00	57.82	A	C
ATOM	986	CB	THR	313	111.709	-16.055	0.436	1.00	55.55	A	C
ATOM	987	OG1	THR	313	111.841	-14.645	0.218	1.00	53.11	A	O
ATOM	988	CG2	THR	313	110.395	-16.311	1.125	1.00	54.74	A	C
ATOM	989	C	THR	313	112.720	-18.055	1.600	1.00	60.20	A	C
ATOM	990	O	THR	313	112.409	-18.437	2.731	1.00	59.81	A	O
ATOM	991	N	GLU	314	112.935	-18.888	0.582	1.00	63.45	A	N
ATOM	992	CA	GLU	314	112.833	-20.347	0.704	1.00	67.11	A	C
ATOM	993	CB	GLU	314	113.251	-21.024	-0.607	1.00	68.35	A	C
ATOM	994	CG	GLU	314	112.380	-20.712	-1.813	1.00	71.96	A	C
ATOM	995	CD	GLU	314	111.030	-21.408	-1.768	1.00	73.77	A	C
ATOM	996	OE1	GLU	314	110.015	-20.761	-2.116	1.00	74.66	A	O
ATOM	997	OE2	GLU	314	110.989	-22.605	-1.398	1.00	74.46	A	O
ATOM	998	C	GLU	314	113.754	-20.851	1.811	1.00	68.69	A	C
ATOM	999	O	GLU	314	113.322	-21.550	2.733	1.00	69.27	A	O
ATOM	1000	N	ALA	315	115.028	-20.481	1.704	1.00	70.10	A	N
ATOM	1001	CA	ALA	315	116.048	-20.875	2.664	1.00	71.57	A	C
ATOM	1002	CB	ALA	315	117.408	-20.458	2.162	1.00	71.70	A	C
ATOM	1003	C	ALA	315	115.796	-20.279	4.037	1.00	73.33	A	C
ATOM	1004	O	ALA	315	116.305	-20.781	5.035	1.00	73.28	A	O
ATOM	1005	N	ARG	316	115.013	-19.203	4.077	1.00	76.00	A	N
ATOM	1006	CA	ARG	316	114.684	-18.520	5.327	1.00	77.98	A	C
ATOM	1007	CB	ARG	316	114.180	-17.098	5.047	1.00	79.43	A	C
ATOM	1008	CG	ARG	316	114.139	-16.178	6.261	1.00	80.88	A	C
ATOM	1009	CD	ARG	316	113.734	-14.767	5.865	1.00	83.21	A	C
ATOM	1010	NE	ARG	316	114.744	-14.103	5.038	1.00	85.79	A	N
ATOM	1011	CZ	ARG	316	114.478	-13.200	4.092	1.00	86.90	A	C
ATOM	1012	NH1	ARG	316	115.473	-12.650	3.401	1.00	86.50	A	N
ATOM	1013	NH2	ARG	316	113.221	-12.858	3.818	1.00	87.01	A	N
ATOM	1014	C	ARG	316	113.640	-19.307	6.109	1.00	78.46	A	C
ATOM	1015	O	ARG	316	113.749	-19.447	7.327	1.00	78.22	A	O
ATOM	1016	N	LYS	317	112.624	-19.811	5.414	1.00	79.04	A	N
ATOM	1017	CA	LYS	317	111.590	-20.594	6.076	1.00	80.29	A	C
ATOM	1018	CB	LYS	317	110.218	-20.340	5.450	1.00	80.52	A	C
ATOM	1019	CG	LYS	317	110.116	-20.665	3.977	1.00	81.30	A	C
ATOM	1020	CD	LYS	317	108.735	-20.330	3.471	1.00	80.94	A	C
ATOM	1021	CE	LYS	317	108.628	-20.556	1.986	1.00	81.57	A	C
ATOM	1022	NZ	LYS	317	107.255	-20.231	1.528	1.00	82.57	A	N
ATOM	1023	C	LYS	317	111.938	-22.078	6.054	1.00	80.81	A	C
ATOM	1024	O	LYS	317	111.066	-22.938	5.998	1.00	81.14	A	O
ATOM	1025	N	GLN	318	113.230	-22.366	6.113	1.00	81.97	A	N
ATOM	1026	CA	GLN	318	113.707	-23.736	6.116	1.00	83.86	A	C
ATOM	1027	CB	GLN	318	114.288	-24.089	4.748	1.00	84.79	A	C



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ATOM	1028	CG	GLN	318	114.438	-25.583	4.504	1.00	87.10	A	C
ATOM	1029	CD	GLN	318	115.569	-25.913	3.547	1.00	88.16	A	C
ATOM	1030	OE1	GLN	318	115.884	-25.133	2.644	1.00	88.58	A	O
ATOM	1031	NE2	GLN	318	116.197	-27.069	3.748	1.00	87.95	A	N
ATOM	1032	C	GLN	318	114.780	-23.873	7.196	1.00	84.94	A	C
ATOM	1033	O	GLN	318	115.500	-24.870	7.247	1.00	85.08	A	O
ATOM	1034	N	MET	319	114.862	-22.870	8.070	1.00	86.44	A	N
ATOM	1035	CA	MET	319	115.836	-22.835	9.167	1.00	87.70	A	C
ATOM	1036	CB	MET	319	115.604	-21.595	10.039	1.00	88.04	A	C
ATOM	1037	CG	MET	319	115.806	-20.260	9.350	1.00	89.10	A	C
ATOM	1038	SD	MET	319	115.225	-18.875	10.370	1.00	90.86	A	S
ATOM	1039	CE	MET	319	116.758	-18.350	11.148	1.00	90.31	A	C
ATOM	1040	C	MET	319	115.767	-24.071	10.065	1.00	88.36	A	C
ATOM	1041	O	MET	319	114.767	-24.795	10.071	1.00	88.46	A	O
ATOM	1042	N	SER	320	116.835	-24.301	10.827	1.00	88.88	A	N
ATOM	1043	CA	SER	320	116.884	-25.429	11.750	1.00	90.06	A	C
ATOM	1044	CB	SER	320	118.332	-25.852	12.018	1.00	90.09	A	C
ATOM	1045	OG	SER	320	119.073	-24.820	12.640	1.00	89.76	A	O
ATOM	1046	C	SER	320	116.190	-25.036	13.057	1.00	90.84	A	C
ATOM	1047	O	SER	320	116.051	-23.853	13.357	1.00	91.09	A	O
ATOM	1048	N	LYS	321	115.765	-26.032	13.828	1.00	91.94	A	N
ATOM	1049	CA	LYS	321	115.075	-25.801	15.098	1.00	92.41	A	C
ATOM	1050	CB	LYS	321	114.676	-27.142	15.730	1.00	92.95	A	C
ATOM	1051	CG	LYS	321	113.700	-27.026	16.893	1.00	92.79	A	C
ATOM	1052	CD	LYS	321	113.261	-28.390	17.400	1.00	91.99	A	C
ATOM	1053	CE	LYS	321	112.227	-28.239	18.501	1.00	92.16	A	C
ATOM	1054	NZ	LYS	321	111.732	-29.549	18.989	1.00	92.05	A	N
ATOM	1055	C	LYS	321	115.902	-24.970	16.084	1.00	92.46	A	C
ATOM	1056	O	LYS	321	115.347	-24.276	16.934	1.00	92.13	A	O
ATOM	1057	N	GLU	322	117.225	-25.039	15.957	1.00	92.83	A	N
ATOM	1058	CA	GLU	322	118.123	-24.287	16.830	1.00	93.67	A	C
ATOM	1059	CB	GLU	322	119.505	-24.951	16.867	1.00	94.85	A	C
ATOM	1060	CG	GLU	322	120.512	-24.272	17.792	1.00	95.62	A	C
ATOM	1061	CD	GLU	322	121.876	-24.938	17.761	1.00	96.26	A	C
ATOM	1062	OE1	GLU	322	122.213	-25.640	18.739	1.00	96.23	A	O
ATOM	1063	OE2	GLU	322	122.609	-24.759	16.762	1.00	96.26	A	O
ATOM	1064	C	GLU	322	118.244	-22.818	16.404	1.00	93.32	A	C
ATOM	1065	O	GLU	322	118.516	-21.946	17.234	1.00	93.27	A	O
ATOM	1066	N	GLU	323	118.055	-22.551	15.111	1.00	92.93	A	N
ATOM	1067	CA	GLU	323	118.128	-21.183	14.587	1.00	92.40	A	C
ATOM	1068	CB	GLU	323	118.479	-21.177	13.090	1.00	93.04	A	C
ATOM	1069	CG	GLU	323	119.748	-21.951	12.707	1.00	94.42	A	C
ATOM	1070	CD	GLU	323	120.981	-21.563	13.519	1.00	95.63	A	C
ATOM	1071	OE1	GLU	323	121.565	-20.490	13.256	1.00	96.19	A	O
ATOM	1072	OE2	GLU	323	121.380	-22.349	14.407	1.00	95.97	A	O
ATOM	1073	C	GLU	323	116.796	-20.461	14.825	1.00	91.17	A	C
ATOM	1074	O	GLU	323	116.775	-19.304	15.247	1.00	90.81	A	O
ATOM	1075	N	LYS	324	115.692	-21.165	14.578	1.00	89.75	A	N
ATOM	1076	CA	LYS	324	114.347	-20.631	14.782	1.00	88.32	A	C
ATOM	1077	CB	LYS	324	113.317	-21.529	14.102	1.00	88.19	A	C
ATOM	1078	CG	LYS	324	113.044	-21.183	12.657	1.00	88.28	A	C
ATOM	1079	CD	LYS	324	111.759	-20.388	12.528	1.00	89.14	A	C
ATOM	1080	CE	LYS	324	110.558	-21.221	12.962	1.00	89.66	A	C
ATOM	1081	NZ	LYS	324	109.273	-20.471	12.881	1.00	90.31	A	N
ATOM	1082	C	LYS	324	114.026	-20.518	16.272	1.00	87.72	A	C
ATOM	1083	O	LYS	324	112.865	-20.571	16.679	1.00	87.87	A	O
ATOM	1084	N	LEU	325	115.072	-20.407	17.082	1.00	86.61	A	N
ATOM	1085	CA	LEU	325	114.941	-20.268	18.522	1.00	86.06	A	C
ATOM	1086	CB	LEU	325	115.156	-21.600	19.236	1.00	85.56	A	C
ATOM	1087	CG	LEU	325	114.968	-21.530	20.756	1.00	85.29	A	C
ATOM	1088	CD1	LEU	325	113.498	-21.328	21.105	1.00	84.66	A	C
ATOM	1089	CD2	LEU	325	115.498	-22.792	21.398	1.00	85.29	A	C
ATOM	1090	C	LEU	325	116.007	-19.285	18.951	1.00	85.97	A	C

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ATOM	1091	O	LEU	325	115.832	-18.550	19.921	1.00	86.58	A	O
ATOM	1092	N	LYS	326	117.129	-19.296	18.238	1.00	85.78	A	N
ATOM	1093	CA	LYS	326	118.215	-18.371	18.527	1.00	85.50	A	C
ATOM	1094	CB	LYS	326	119.523	-18.839	17.879	1.00	86.17	A	C
ATOM	1095	CG	LYS	326	120.736	-18.006	18.270	1.00	87.13	A	C
ATOM	1096	CD	LYS	326	122.027	-18.647	17.795	1.00	88.71	A	C
ATOM	1097	CE	LYS	326	123.244	-17.838	18.223	1.00	89.36	A	C
ATOM	1098	NZ	LYS	326	123.271	-16.492	17.588	1.00	89.92	A	N
ATOM	1099	C	LYS	326	117.809	-17.000	17.986	1.00	84.55	A	C
ATOM	1100	O	LYS	326	118.410	-15.987	18.336	1.00	85.29	A	O
ATOM	1101	N	ILE	327	116.768	-16.985	17.152	1.00	82.85	A	N
ATOM	1102	CA	ILE	327	116.250	-15.756	16.555	1.00	81.01	A	C
ATOM	1103	CB	ILE	327	115.972	-15.951	15.041	1.00	81.29	A	C
ATOM	1104	CG2	ILE	327	114.805	-16.895	14.824	1.00	81.65	A	C
ATOM	1105	CG1	ILE	327	115.688	-14.613	14.366	1.00	81.58	A	C
ATOM	1106	CD1	ILE	327	115.441	-14.739	12.873	1.00	82.56	A	C
ATOM	1107	C	ILE	327	114.982	-15.289	17.282	1.00	79.66	A	C
ATOM	1108	O	ILE	327	114.708	-14.092	17.352	1.00	79.69	A	O
ATOM	1109	N	LYS	328	114.219	-16.234	17.830	1.00	77.92	A	N
ATOM	1110	CA	LYS	328	112.996	-15.903	18.560	1.00	75.77	A	C
ATOM	1111	CB	LYS	328	112.141	-17.146	18.825	1.00	74.49	A	C
ATOM	1112	CG	LYS	328	111.150	-17.426	17.715	1.00	74.97	A	C
ATOM	1113	CD	LYS	328	111.871	-17.443	16.372	1.00	75.80	A	C
ATOM	1114	CE	LYS	328	110.944	-17.266	15.181	1.00	75.49	A	C
ATOM	1115	NZ	LYS	328	111.744	-17.138	13.926	1.00	75.18	A	N
ATOM	1116	C	LYS	328	113.348	-15.234	19.865	1.00	74.88	A	C
ATOM	1117	O	LYS	328	112.922	-14.113	20.125	1.00	75.48	A	O
ATOM	1118	N	GLU	329	114.167	-15.904	20.662	1.00	73.76	A	N
ATOM	1119	CA	GLU	329	114.581	-15.356	21.939	1.00	73.44	A	C
ATOM	1120	CB	GLU	329	115.417	-16.371	22.712	1.00	75.15	A	C
ATOM	1121	CG	GLU	329	114.631	-17.613	23.115	1.00	77.58	A	C
ATOM	1122	CD	GLU	329	115.406	-18.528	24.048	1.00	79.04	A	C
ATOM	1123	OE1	GLU	329	115.849	-18.050	25.118	1.00	79.68	A	O
ATOM	1124	OE2	GLU	329	115.565	-19.725	23.714	1.00	79.21	A	O
ATOM	1125	C	GLU	329	115.331	-14.037	21.777	1.00	72.14	A	C
ATOM	1126	O	GLU	329	115.479	-13.283	22.738	1.00	72.45	A	O
ATOM	1127	N	GLU	330	115.792	-13.753	20.563	1.00	70.40	A	N
ATOM	1128	CA	GLU	330	116.489	-12.498	20.311	1.00	69.31	A	C
ATOM	1129	CB	GLU	330	117.469	-12.624	19.151	1.00	71.76	A	C
ATOM	1130	CG	GLU	330	118.879	-12.985	19.608	1.00	75.04	A	C
ATOM	1131	CD	GLU	330	119.890	-13.025	18.472	1.00	76.47	A	C
ATOM	1132	OE1	GLU	330	120.761	-13.924	18.501	1.00	77.37	A	O
ATOM	1133	OE2	GLU	330	119.820	-12.162	17.562	1.00	76.34	A	O
ATOM	1134	C	GLU	330	115.514	-11.350	20.079	1.00	67.26	A	C
ATOM	1135	O	GLU	330	115.774	-10.228	20.509	1.00	67.28	A	O
ATOM	1136	N	ASN	331	114.403	-11.631	19.394	1.00	64.61	A	N
ATOM	1137	CA	ASN	331	113.364	-10.624	19.143	1.00	61.20	A	C
ATOM	1138	CB	ASN	331	112.401	-11.078	18.041	1.00	61.64	A	C
ATOM	1139	CG	ASN	331	112.775	-10.540	16.668	1.00	62.02	A	C
ATOM	1140	OD1	ASN	331	111.916	-10.386	15.800	1.00	61.62	A	O
ATOM	1141	ND2	ASN	331	114.056	-10.249	16.468	1.00	62.37	A	N
ATOM	1142	C	ASN	331	112.578	-10.418	20.428	1.00	58.87	A	C
ATOM	1143	O	ASN	331	111.949	-9.378	20.618	1.00	57.92	A	O
ATOM	1144	N	GLU	332	112.606	-11.442	21.282	1.00	57.13	A	N
ATOM	1145	CA	GLU	332	111.930	-11.442	22.576	1.00	55.65	A	C
ATOM	1146	CB	GLU	332	111.856	-12.860	23.147	1.00	58.06	A	C
ATOM	1147	CG	GLU	332	110.535	-13.588	22.910	1.00	62.05	A	C
ATOM	1148	CD	GLU	332	110.427	-14.917	23.677	1.00	63.86	A	C
ATOM	1149	OE1	GLU	332	111.165	-15.122	24.674	1.00	64.88	A	O
ATOM	1150	OE2	GLU	332	109.585	-15.756	23.283	1.00	63.96	A	O
ATOM	1151	C	GLU	332	112.625	-10.549	23.594	1.00	53.23	A	C
ATOM	1152	O	GLU	332	111.966	-9.916	24.422	1.00	52.47	A	O
ATOM	1153	N	LYS	333	113.954	-10.532	23.573	1.00	50.47	A	N

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ATOM	1154	CA	LYS	333	114.662	-9.695	24.521	1.00	48.46	A	C
ATOM	1155	CB	LYS	333	116.087	-10.198	24.780	1.00	51.22	A	C
ATOM	1156	CG	LYS	333	117.071	-10.048	23.648	1.00	55.53	A	C
ATOM	1157	CD	LYS	333	118.474	-10.356	24.156	1.00	59.31	A	C
ATOM	1158	CE	LYS	333	119.534	-10.124	23.086	1.00	62.78	A	C
ATOM	1159	NZ	LYS	333	120.919	-10.404	23.589	1.00	65.26	A	N
ATOM	1160	C	LYS	333	114.633	-8.244	24.067	1.00	45.35	A	C
ATOM	1161	O	LYS	333	114.770	-7.325	24.876	1.00	46.03	A	O
ATOM	1162	N	LEU	334	114.419	-8.043	22.772	1.00	41.64	A	N
ATOM	1163	CA	LEU	334	114.327	-6.701	22.210	1.00	38.51	A	C
ATOM	1164	CB	LEU	334	114.297	-6.777	20.684	1.00	38.05	A	C
ATOM	1165	CG	LEU	334	115.544	-6.309	19.936	1.00	37.26	A	C
ATOM	1166	CD1	LEU	334	115.594	-6.938	18.559	1.00	37.55	A	C
ATOM	1167	CD2	LEU	334	115.538	-4.798	19.835	1.00	37.49	A	C
ATOM	1168	C	LEU	334	113.044	-6.047	22.725	1.00	37.35	A	C
ATOM	1169	O	LEU	334	113.028	-4.862	23.066	1.00	37.55	A	O
ATOM	1170	N	LEU	335	111.973	-6.836	22.776	1.00	35.54	A	N
ATOM	1171	CA	LEU	335	110.679	-6.373	23.255	1.00	34.42	A	C
ATOM	1172	CB	LEU	335	109.621	-7.462	23.023	1.00	34.28	A	C
ATOM	1173	CG	LEU	335	108.104	-7.192	22.944	1.00	34.41	A	C
ATOM	1174	CD1	LEU	335	107.596	-6.333	24.092	1.00	32.48	A	C
ATOM	1175	CD2	LEU	335	107.764	-6.533	21.622	1.00	33.83	A	C
ATOM	1176	C	LEU	335	110.796	-6.075	24.749	1.00	34.58	A	C
ATOM	1177	O	LEU	335	110.112	-5.204	25.272	1.00	35.11	A	O
ATOM	1178	N	LYS	336	111.676	-6.800	25.431	1.00	35.06	A	N
ATOM	1179	CA	LYS	336	111.867	-6.620	26.866	1.00	35.37	A	C
ATOM	1180	CB	LYS	336	112.392	-7.915	27.502	1.00	37.10	A	C
ATOM	1181	CG	LYS	336	111.302	-8.749	28.177	1.00	38.94	A	C
ATOM	1182	CD	LYS	336	110.015	-8.817	27.328	1.00	39.05	A	C
ATOM	1183	CE	LYS	336	108.810	-9.252	28.159	1.00	38.83	A	C
ATOM	1184	NZ	LYS	336	107.530	-9.040	27.427	1.00	37.86	A	N
ATOM	1185	C	LYS	336	112.759	-5.450	27.232	1.00	34.62	A	C
ATOM	1186	O	LYS	336	112.724	-4.971	28.359	1.00	35.35	A	O
ATOM	1187	N	GLU	337	113.563	-4.987	26.290	1.00	34.16	A	N
ATOM	1188	CA	GLU	337	114.436	-3.863	26.573	1.00	34.72	A	C
ATOM	1189	CB	GLU	337	115.875	-4.171	26.143	1.00	39.61	A	C
ATOM	1190	CG	GLU	337	116.881	-4.216	27.290	1.00	45.19	A	C
ATOM	1191	CD	GLU	337	116.684	-5.431	28.168	1.00	48.23	A	C
ATOM	1192	OE1	GLU	337	116.322	-5.266	29.356	1.00	49.96	A	O
ATOM	1193	OE2	GLU	337	116.878	-6.554	27.655	1.00	49.46	A	O
ATOM	1194	C	GLU	337	113.968	-2.583	25.892	1.00	32.42	A	C
ATOM	1195	O	GLU	337	114.205	-1.479	26.398	1.00	32.90	A	O
ATOM	1196	N	TYR	338	113.282	-2.730	24.762	1.00	27.77	A	N
ATOM	1197	CA	TYR	338	112.841	-1.570	24.017	1.00	23.64	A	C
ATOM	1198	CB	TYR	338	113.497	-1.575	22.646	1.00	21.31	A	C
ATOM	1199	CG	TYR	338	114.983	-1.381	22.722	1.00	21.02	A	C
ATOM	1200	CD1	TYR	338	115.529	-0.117	22.955	1.00	22.26	A	C
ATOM	1201	CE1	TYR	338	116.914	0.067	23.061	1.00	22.30	A	C
ATOM	1202	CD2	TYR	338	115.852	-2.460	22.595	1.00	21.79	A	C
ATOM	1203	CE2	TYR	338	117.240	-2.292	22.700	1.00	22.15	A	C
ATOM	1204	CZ	TYR	338	117.762	-1.029	22.931	1.00	21.68	A	C
ATOM	1205	OH	TYR	338	119.121	-0.866	23.018	1.00	18.57	A	O
ATOM	1206	C	TYR	338	111.347	-1.354	23.887	1.00	22.43	A	C
ATOM	1207	O	TYR	338	110.896	-0.203	23.772	1.00	22.41	A	O
ATOM	1208	N	GLY	339	110.588	-2.449	23.931	1.00	19.73	A	N
ATOM	1209	CA	GLY	339	109.140	-2.380	23.792	1.00	16.11	A	C
ATOM	1210	C	GLY	339	108.313	-1.853	24.956	1.00	13.81	A	C
ATOM	1211	O	GLY	339	107.088	-1.830	24.876	1.00	13.48	A	O
ATOM	1212	N	PHE	340	108.959	-1.467	26.049	1.00	12.94	A	N
ATOM	1213	CA	PHE	340	108.236	-0.932	27.204	1.00	12.15	A	C
ATOM	1214	CB	PHE	340	108.303	-1.910	28.379	1.00	11.90	A	C
ATOM	1215	CG	PHE	340	107.514	-3.156	28.174	1.00	11.50	A	C
ATOM	1216	CD1	PHE	340	107.977	-4.162	27.327	1.00	14.31	A	C

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ATOM	1217	CD2	PHE	340	106.321	-3.346	28.842	1.00	11.88	A	C
ATOM	1218	CE1	PHE	340	107.256	-5.346	27.149	1.00	11.81	A	C
ATOM	1219	CE2	PHE	340	105.595	-4.526	28.670	1.00	12.68	A	C
ATOM	1220	CZ	PHE	340	106.071	-5.526	27.817	1.00	11.53	A	C
ATOM	1221	C	PHE	340	108.787	0.434	27.640	1.00	10.21	A	C
ATOM	1222	O	PHE	340	109.871	0.837	27.227	1.00	10.93	A	O
ATOM	1223	N	CYS	341	108.032	1.139	28.468	1.00	6.82	A	N
ATOM	1224	CA	CYS	341	108.466	2.430	28.959	1.00	9.42	A	C
ATOM	1225	CB	CYS	341	108.142	3.536	27.946	1.00	10.31	A	C
ATOM	1226	SG	CYS	341	106.446	4.172	28.018	1.00	14.51	A	S
ATOM	1227	C	CYS	341	107.753	2.714	30.271	1.00	10.84	A	C
ATOM	1228	O	CYS	341	106.725	2.109	30.576	1.00	13.53	A	O
ATOM	1229	N	ILE	342	108.283	3.653	31.040	1.00	11.14	A	N
ATOM	1230	CA	ILE	342	107.677	3.995	32.312	1.00	10.77	A	C
ATOM	1231	CB	ILE	342	108.714	4.025	33.442	1.00	10.74	A	C
ATOM	1232	CG2	ILE	342	108.020	4.173	34.782	1.00	8.59	A	C
ATOM	1233	CG1	ILE	342	109.589	2.775	33.386	1.00	10.77	A	C
ATOM	1234	CD1	ILE	342	108.807	1.503	33.303	1.00	11.92	A	C
ATOM	1235	C	ILE	342	107.056	5.362	32.249	1.00	12.39	A	C
ATOM	1236	O	ILE	342	107.747	6.358	32.083	1.00	12.33	A	O
ATOM	1237	N	MET	343	105.743	5.408	32.375	1.00	15.78	A	N
ATOM	1238	CA	MET	343	105.047	6.679	32.373	1.00	19.97	A	C
ATOM	1239	CB	MET	343	104.212	6.869	31.106	1.00	22.26	A	C
ATOM	1240	CG	MET	343	103.498	8.210	31.050	1.00	25.07	A	C
ATOM	1241	SD	MET	343	102.390	8.337	29.656	1.00	32.17	A	S
ATOM	1242	CE	MET	343	103.483	9.053	28.437	1.00	29.28	A	C
ATOM	1243	C	MET	343	104.166	6.779	33.606	1.00	22.04	A	C
ATOM	1244	O	MET	343	103.148	6.082	33.721	1.00	22.50	A	O
ATOM	1245	N	ASP	344	104.635	7.589	34.554	1.00	24.61	A	N
ATOM	1246	CA	ASP	344	103.944	7.868	35.800	1.00	26.62	A	C
ATOM	1247	CB	ASP	344	102.657	8.651	35.526	1.00	27.07	A	C
ATOM	1248	CG	ASP	344	102.920	10.042	35.032	1.00	28.13	A	C
ATOM	1249	OD1	ASP	344	104.102	10.433	34.963	1.00	28.41	A	O
ATOM	1250	OD2	ASP	344	101.941	10.753	34.722	1.00	30.84	A	O
ATOM	1251	C	ASP	344	103.619	6.685	36.679	1.00	28.20	A	C
ATOM	1252	O	ASP	344	102.483	6.177	36.681	1.00	32.00	A	O
ATOM	1253	N	ASN	345	104.609	6.224	37.423	1.00	27.10	A	N
ATOM	1254	CA	ASN	345	104.363	5.135	38.355	1.00	27.05	A	C
ATOM	1255	CB	ASN	345	103.266	5.565	39.345	1.00	27.11	A	C
ATOM	1256	CG	ASN	345	103.409	7.026	39.787	1.00	29.26	A	C
ATOM	1257	OD1	ASN	345	102.711	7.916	39.278	1.00	26.23	A	O
ATOM	1258	ND2	ASN	345	104.331	7.279	40.728	1.00	28.98	A	N
ATOM	1259	C	ASN	345	103.975	3.794	37.746	1.00	25.97	A	C
ATOM	1260	O	ASN	345	103.792	2.828	38.483	1.00	26.31	A	O
ATOM	1261	N	HIS	346	103.833	3.724	36.423	1.00	26.21	A	N
ATOM	1262	CA	HIS	346	103.445	2.466	35.770	1.00	26.75	A	C
ATOM	1263	CB	HIS	346	101.951	2.449	35.460	1.00	27.01	A	C
ATOM	1264	CG	HIS	346	101.082	2.353	36.667	1.00	26.54	A	C
ATOM	1265	CD2	HIS	346	100.487	3.309	37.417	1.00	26.89	A	C
ATOM	1266	ND1	HIS	346	100.722	1.147	37.223	1.00	26.25	A	N
ATOM	1267	CE1	HIS	346	99.941	1.362	38.265	1.00	26.27	A	C
ATOM	1268	NE2	HIS	346	99.781	2.665	38.404	1.00	26.78	A	N
ATOM	1269	C	HIS	346	104.171	2.161	34.481	1.00	26.78	A	C
ATOM	1270	O	HIS	346	104.534	3.067	33.735	1.00	27.71	A	O
ATOM	1271	N	LYS	347	104.330	0.869	34.212	1.00	27.45	A	N
ATOM	1272	CA	LYS	347	104.982	0.382	32.999	1.00	28.71	A	C
ATOM	1273	CB	LYS	347	105.744	-0.914	33.301	1.00	28.65	A	C
ATOM	1274	CG	LYS	347	106.131	-1.708	32.070	1.00	30.18	A	C
ATOM	1275	CD	LYS	347	106.746	-3.059	32.415	1.00	33.26	A	C
ATOM	1276	CE	LYS	347	108.117	-2.929	33.087	1.00	33.13	A	C
ATOM	1277	NZ	LYS	347	108.942	-4.164	32.883	1.00	32.99	A	N
ATOM	1278	C	LYS	347	103.914	0.132	31.920	1.00	29.28	A	C
ATOM	1279	O	LYS	347	102.956	-0.619	32.142	1.00	30.00	A	O

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ATOM	1280	N	GLU	348	104.071	0.765	30.761	1.00	29.23	A	N
ATOM	1281	CA	GLU	348	103.113	0.606	29.673	1.00	30.76	A	C
ATOM	1282	CB	GLU	348	102.368	1.920	29.413	1.00	34.37	A	C
ATOM	1283	CG	GLU	348	101.984	2.682	30.688	1.00	39.93	A	C
ATOM	1284	CD	GLU	348	100.493	2.904	30.832	1.00	42.70	A	C
ATOM	1285	OE1	GLU	348	100.036	4.027	30.506	1.00	44.66	A	O
ATOM	1286	OE2	GLU	348	99.789	1.961	31.274	1.00	43.37	A	O
ATOM	1287	C	GLU	348	103.846	0.182	28.417	1.00	30.03	A	C
ATOM	1288	O	GLU	348	105.017	0.517	28.242	1.00	30.91	A	O
ATOM	1289	N	ARG	349	103.158	-0.551	27.544	1.00	28.96	A	N
ATOM	1290	CA	ARG	349	103.762	-1.017	26.305	1.00	28.40	A	C
ATOM	1291	CB	ARG	349	103.114	-2.334	25.868	1.00	30.60	A	C
ATOM	1292	CG	ARG	349	103.674	-2.909	24.588	1.00	37.14	A	C
ATOM	1293	CD	ARG	349	103.280	-4.371	24.396	1.00	45.15	A	C
ATOM	1294	NE	ARG	349	103.546	-4.873	23.041	1.00	51.61	A	N
ATOM	1295	CZ	ARG	349	104.697	-4.743	22.375	1.00	53.93	A	C
ATOM	1296	NH1	ARG	349	105.735	-4.116	22.921	1.00	55.02	A	N
ATOM	1297	NH2	ARG	349	104.803	-5.234	21.144	1.00	55.31	A	N
ATOM	1298	C	ARG	349	103.731	0.033	25.183	1.00	26.91	A	C
ATOM	1299	O	ARG	349	102.820	0.853	25.111	1.00	25.48	A	O
ATOM	1300	N	ILE	350	104.781	0.033	24.363	1.00	26.95	A	N
ATOM	1301	CA	ILE	350	104.947	0.946	23.232	1.00	27.40	A	C
ATOM	1302	CB	ILE	350	106.435	1.280	23.027	1.00	27.80	A	C
ATOM	1303	CG2	ILE	350	106.585	2.403	22.025	1.00	30.18	A	C
ATOM	1304	CG1	ILE	350	107.074	1.699	24.354	1.00	28.43	A	C
ATOM	1305	CD1	ILE	350	108.534	2.030	24.246	1.00	26.83	A	C
ATOM	1306	C	ILE	350	104.458	0.244	21.976	1.00	28.54	A	C
ATOM	1307	O	ILE	350	104.662	-0.951	21.826	1.00	30.90	A	O
ATOM	1308	N	ALA	351	103.840	0.975	21.058	1.00	30.67	A	N
ATOM	1309	CA	ALA	351	103.333	0.359	19.829	1.00	33.08	A	C
ATOM	1310	CB	ALA	351	102.334	1.279	19.127	1.00	33.40	A	C
ATOM	1311	C	ALA	351	104.432	-0.076	18.862	1.00	34.58	A	C
ATOM	1312	O	ALA	351	104.596	-1.276	18.603	1.00	37.02	A	O
ATOM	1313	N	ASN	352	105.171	0.890	18.322	1.00	34.41	A	N
ATOM	1314	CA	ASN	352	106.248	0.591	17.391	1.00	35.07	A	C
ATOM	1315	CB	ASN	352	105.940	1.154	15.995	1.00	38.71	A	C
ATOM	1316	CG	ASN	352	105.883	2.688	15.956	1.00	42.37	A	C
ATOM	1317	OD1	ASN	352	106.579	3.325	15.151	1.00	42.23	A	O
ATOM	1318	ND2	ASN	352	105.055	3.281	16.821	1.00	42.54	A	N
ATOM	1319	C	ASN	352	107.562	1.141	17.911	1.00	34.39	A	C
ATOM	1320	O	ASN	352	107.847	2.334	17.770	1.00	34.88	A	O
ATOM	1321	N	PHE	353	108.358	0.277	18.535	1.00	32.47	A	N
ATOM	1322	CA	PHE	353	109.637	0.705	19.076	1.00	29.38	A	C
ATOM	1323	CB	PHE	353	110.021	-0.107	20.319	1.00	26.79	A	C
ATOM	1324	CG	PHE	353	110.025	-1.597	20.116	1.00	25.35	A	C
ATOM	1325	CD1	PHE	353	111.214	-2.273	19.848	1.00	23.29	A	C
ATOM	1326	CD2	PHE	353	108.847	-2.328	20.213	1.00	24.79	A	C
ATOM	1327	CE1	PHE	353	111.232	-3.630	19.681	1.00	20.05	A	C
ATOM	1328	CE2	PHE	353	108.858	-3.689	20.047	1.00	23.28	A	C
ATOM	1329	CZ	PHE	353	110.055	-4.345	19.778	1.00	21.85	A	C
ATOM	1330	C	PHE	353	110.759	0.730	18.048	1.00	29.82	A	C
ATOM	1331	O	PHE	353	111.755	1.422	18.224	1.00	30.47	A	O
ATOM	1332	N	LYS	354	110.578	0.021	16.945	1.00	30.53	A	N
ATOM	1333	CA	LYS	354	111.598	0.006	15.912	1.00	31.62	A	C
ATOM	1334	CB	LYS	354	111.889	-1.431	15.474	1.00	33.25	A	C
ATOM	1335	CG	LYS	354	110.699	-2.172	14.931	1.00	35.89	A	C
ATOM	1336	CD	LYS	354	111.013	-3.637	14.758	1.00	38.78	A	C
ATOM	1337	CE	LYS	354	111.109	-4.330	16.104	1.00	40.86	A	C
ATOM	1338	NZ	LYS	354	111.496	-5.767	15.968	1.00	42.55	A	N
ATOM	1339	C	LYS	354	111.202	0.862	14.716	1.00	32.07	A	C
ATOM	1340	O	LYS	354	110.060	0.822	14.267	1.00	32.24	A	O
ATOM	1341	N	ILE	355	112.141	1.664	14.224	1.00	32.29	A	N
ATOM	1342	CA	ILE	355	111.889	2.515	13.065	1.00	31.57	A	C

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ATOM	1343	CB	ILE	355	113.055	3.489	12.817	1.00	30.63	A	C
ATOM	1344	CG2	ILE	355	112.661	4.495	11.751	1.00	31.53	A	C
ATOM	1345	CG1	ILE	355	113.444	4.208	14.109	1.00	29.88	A	C
ATOM	1346	CD1	ILE	355	112.326	5.015	14.702	1.00	29.70	A	C
ATOM	1347	C	ILE	355	111.773	1.620	11.833	1.00	31.97	A	C
ATOM	1348	O	ILE	355	112.440	0.592	11.743	1.00	33.32	A	O
ATOM	1349	N	GLU	356	110.932	2.006	10.884	1.00	32.40	A	N
ATOM	1350	CA	GLU	356	110.762	1.228	9.666	1.00	33.05	A	C
ATOM	1351	CB	GLU	356	109.534	1.718	8.886	1.00	38.62	A	C
ATOM	1352	CG	GLU	356	109.598	3.181	8.430	1.00	43.51	A	C
ATOM	1353	CD	GLU	356	108.479	4.029	9.020	1.00	48.88	A	C
ATOM	1354	OE1	GLU	356	108.511	4.295	10.245	1.00	50.05	A	O
ATOM	1355	OE2	GLU	356	107.567	4.434	8.261	1.00	51.75	A	O
ATOM	1356	C	GLU	356	112.003	1.368	8.801	1.00	30.52	A	C
ATOM	1357	O	GLU	356	112.570	2.457	8.703	1.00	32.32	A	O
ATOM	1358	N	PRO	357	112.473	0.266	8.199	1.00	27.68	A	N
ATOM	1359	CD	PRO	357	112.029	-1.133	8.334	1.00	28.01	A	C
ATOM	1360	CA	PRO	357	113.663	0.353	7.348	1.00	26.18	A	C
ATOM	1361	CB	PRO	357	113.975	-1.124	7.053	1.00	26.83	A	C
ATOM	1362	CG	PRO	357	112.639	-1.791	7.116	1.00	26.14	A	C
ATOM	1363	C	PRO	357	113.368	1.146	6.065	1.00	23.32	A	C
ATOM	1364	O	PRO	357	112.210	1.441	5.762	1.00	23.36	A	O
ATOM	1365	N	PRO	358	114.412	1.552	5.327	1.00	20.89	A	N
ATOM	1366	CD	PRO	358	115.861	1.456	5.569	1.00	19.55	A	C
ATOM	1367	CA	PRO	358	114.130	2.303	4.099	1.00	19.08	A	C
ATOM	1368	CB	PRO	358	115.493	2.891	3.737	1.00	18.16	A	C
ATOM	1369	CG	PRO	358	116.432	1.835	4.222	1.00	19.30	A	C
ATOM	1370	C	PRO	358	113.611	1.381	3.003	1.00	17.40	A	C
ATOM	1371	O	PRO	358	113.861	0.178	3.000	1.00	16.23	A	O
ATOM	1372	N	GLY	359	112.871	1.963	2.077	1.00	17.17	A	N
ATOM	1373	CA	GLY	359	112.327	1.189	0.980	1.00	15.07	A	C
ATOM	1374	C	GLY	359	111.689	2.129	-0.007	1.00	12.57	A	C
ATOM	1375	O	GLY	359	111.876	3.340	0.065	1.00	11.34	A	O
ATOM	1376	N	LEU	360	110.973	1.567	-0.965	1.00	11.00	A	N
ATOM	1377	CA	LEU	360	110.297	2.395	-1.948	1.00	8.46	A	C
ATOM	1378	CB	LEU	360	110.287	1.737	-3.315	1.00	4.01	A	C
ATOM	1379	CG	LEU	360	111.714	1.617	-3.794	1.00	1.80	A	C
ATOM	1380	CD1	LEU	360	111.758	0.911	-5.128	1.00	1.00	A	C
ATOM	1381	CD2	LEU	360	112.326	3.008	-3.846	1.00	1.00	A	C
ATOM	1382	C	LEU	360	108.885	2.676	-1.503	1.00	8.19	A	C
ATOM	1383	O	LEU	360	108.158	1.786	-1.052	1.00	9.22	A	O
ATOM	1384	N	PHE	361	108.536	3.948	-1.577	1.00	6.65	A	N
ATOM	1385	CA	PHE	361	107.219	4.394	-1.211	1.00	6.94	A	C
ATOM	1386	CB	PHE	361	107.206	5.926	-1.093	1.00	5.65	A	C
ATOM	1387	CG	PHE	361	105.847	6.490	-0.860	1.00	3.36	A	C
ATOM	1388	CD1	PHE	361	105.121	7.025	-1.906	1.00	1.77	A	C
ATOM	1389	CD2	PHE	361	105.255	6.400	0.382	1.00	1.87	A	C
ATOM	1390	CE1	PHE	361	103.830	7.450	-1.723	1.00	1.15	A	C
ATOM	1391	CE2	PHE	361	103.957	6.828	0.567	1.00	1.00	A	C
ATOM	1392	CZ	PHE	361	103.247	7.350	-0.489	1.00	1.00	A	C
ATOM	1393	C	PHE	361	106.233	3.919	-2.275	1.00	7.22	A	C
ATOM	1394	O	PHE	361	106.499	3.989	-3.469	1.00	8.46	A	O
ATOM	1395	N	ARG	362	105.104	3.394	-1.837	1.00	9.40	A	N
ATOM	1396	CA	ARG	362	104.093	2.938	-2.771	1.00	12.35	A	C
ATOM	1397	CB	ARG	362	103.951	1.417	-2.703	1.00	16.10	A	C
ATOM	1398	CG	ARG	362	102.686	0.873	-3.324	1.00	22.58	A	C
ATOM	1399	CD	ARG	362	102.571	1.235	-4.791	1.00	29.90	A	C
ATOM	1400	NE	ARG	362	101.230	0.937	-5.283	1.00	35.00	A	N
ATOM	1401	CZ	ARG	362	100.216	1.799	-5.272	1.00	36.98	A	C
ATOM	1402	NH1	ARG	362	100.381	3.029	-4.805	1.00	37.78	A	N
ATOM	1403	NH2	ARG	362	99.022	1.417	-5.695	1.00	38.15	A	N
ATOM	1404	C	ARG	362	102.790	3.649	-2.441	1.00	11.65	A	C
ATOM	1405	O	ARG	362	102.192	4.281	-3.303	1.00	10.84	A	O

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ATOM	1406	N	GLY	363	102.392	3.596	-1.175	1.00	12.50	A	N
ATOM	1407	CA	GLY	363	101.165	4.247	-0.748	1.00	15.41	A	C
ATOM	1408	C	GLY	363	99.934	3.556	-1.278	1.00	18.01	A	C
ATOM	1409	O	GLY	363	100.039	2.520	-1.925	1.00	20.43	A	O
ATOM	1410	N	ARG	364	98.763	4.135	-1.045	1.00	19.51	A	N
ATOM	1411	CA	ARG	364	97.536	3.515	-1.516	1.00	21.64	A	C
ATOM	1412	CB	ARG	364	96.582	3.313	-0.339	1.00	22.43	A	C
ATOM	1413	CG	ARG	364	97.231	2.502	0.785	1.00	29.35	A	C
ATOM	1414	CD	ARG	364	96.255	2.041	1.858	1.00	34.12	A	C
ATOM	1415	NE	ARG	364	96.206	2.948	3.009	1.00	39.89	A	N
ATOM	1416	CZ	ARG	364	96.797	2.723	4.184	1.00	41.12	A	C
ATOM	1417	NH1	ARG	364	97.506	1.612	4.387	1.00	41.97	A	N
ATOM	1418	NH2	ARG	364	96.638	3.593	5.177	1.00	39.80	A	N
ATOM	1419	C	ARG	364	96.882	4.295	-2.645	1.00	22.71	A	C
ATOM	1420	O	ARG	364	96.750	5.513	-2.570	1.00	26.28	A	O
ATOM	1421	N	GLY	365	96.524	3.602	-3.719	1.00	22.43	A	N
ATOM	1422	CA	GLY	365	95.881	4.272	-4.833	1.00	21.85	A	C
ATOM	1423	C	GLY	365	96.826	4.727	-5.920	1.00	21.90	A	C
ATOM	1424	O	GLY	365	97.822	4.075	-6.181	1.00	23.00	A	O
ATOM	1425	N	ASN	366	96.512	5.839	-6.570	1.00	22.32	A	N
ATOM	1426	CA	ASN	366	97.362	6.339	-7.641	1.00	22.67	A	C
ATOM	1427	CB	ASN	366	96.498	6.753	-8.833	1.00	27.04	A	C
ATOM	1428	CG	ASN	366	97.274	6.759	-10.131	1.00	32.42	A	C
ATOM	1429	OD1	ASN	366	97.650	7.820	-10.644	1.00	34.79	A	O
ATOM	1430	ND2	ASN	366	97.548	5.564	-10.662	1.00	34.41	A	N
ATOM	1431	C	ASN	366	98.272	7.497	-7.190	1.00	20.88	A	C
ATOM	1432	O	ASN	366	98.328	8.561	-7.821	1.00	19.98	A	O
ATOM	1433	N	HIS	367	99.028	7.253	-6.125	1.00	18.26	A	N
ATOM	1434	CA	HIS	367	99.940	8.248	-5.560	1.00	15.45	A	C
ATOM	1435	CB	HIS	367	100.691	7.634	-4.389	1.00	15.08	A	C
ATOM	1436	CG	HIS	367	100.981	8.601	-3.300	1.00	13.26	A	C
ATOM	1437	CD2	HIS	367	101.780	9.690	-3.264	1.00	15.37	A	C
ATOM	1438	ND1	HIS	367	100.360	8.539	-2.076	1.00	15.66	A	N
ATOM	1439	CE1	HIS	367	100.757	9.555	-1.331	1.00	17.15	A	C
ATOM	1440	NE2	HIS	367	101.620	10.269	-2.029	1.00	17.88	A	N
ATOM	1441	C	HIS	367	100.952	8.851	-6.543	1.00	13.65	A	C
ATOM	1442	O	HIS	367	101.593	8.143	-7.307	1.00	14.79	A	O
ATOM	1443	N	PRO	368	101.104	10.177	-6.531	1.00	11.23	A	N
ATOM	1444	CD	PRO	368	100.198	11.147	-5.909	1.00	11.37	A	C
ATOM	1445	CA	PRO	368	102.037	10.873	-7.416	1.00	11.13	A	C
ATOM	1446	CB	PRO	368	101.644	12.326	-7.232	1.00	7.63	A	C
ATOM	1447	CG	PRO	368	100.229	12.245	-6.904	1.00	10.05	A	C
ATOM	1448	C	PRO	368	103.493	10.691	-7.025	1.00	12.83	A	C
ATOM	1449	O	PRO	368	104.381	11.134	-7.753	1.00	15.64	A	O
ATOM	1450	N	LYS	369	103.735	10.048	-5.882	1.00	11.88	A	N
ATOM	1451	CA	LYS	369	105.088	9.856	-5.387	1.00	10.26	A	C
ATOM	1452	CB	LYS	369	105.242	10.573	-4.047	1.00	11.79	A	C
ATOM	1453	CG	LYS	369	105.456	12.056	-4.188	1.00	13.79	A	C
ATOM	1454	CD	LYS	369	104.854	12.830	-3.039	1.00	17.60	A	C
ATOM	1455	CE	LYS	369	105.410	14.235	-3.010	1.00	19.19	A	C
ATOM	1456	NZ	LYS	369	105.318	14.847	-4.362	1.00	22.62	A	N
ATOM	1457	C	LYS	369	105.518	8.410	-5.252	1.00	10.82	A	C
ATOM	1458	O	LYS	369	106.521	8.118	-4.602	1.00	12.18	A	O
ATOM	1459	N	MET	370	104.758	7.492	-5.837	1.00	10.34	A	N
ATOM	1460	CA	MET	370	105.117	6.085	-5.764	1.00	9.53	A	C
ATOM	1461	CB	MET	370	104.096	5.239	-6.505	1.00	10.61	A	C
ATOM	1462	CG	MET	370	104.020	5.501	-7.982	1.00	11.47	A	C
ATOM	1463	SD	MET	370	102.739	4.482	-8.707	1.00	19.93	A	S
ATOM	1464	CE	MET	370	101.262	5.293	-8.109	1.00	16.05	A	C
ATOM	1465	C	MET	370	106.492	5.923	-6.392	1.00	9.94	A	C
ATOM	1466	O	MET	370	106.776	6.533	-7.414	1.00	11.85	A	O
ATOM	1467	N	GLY	371	107.363	5.158	-5.745	1.00	8.72	A	N
ATOM	1468	CA	GLY	371	108.698	4.957	-6.272	1.00	6.77	A	C

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ATOM	1469	C	GLY	371	109.780	5.744	-5.558	1.00	6.76	A	C
ATOM	1470	O	GLY	371	110.923	5.313	-5.531	1.00	5.27	A	O
ATOM	1471	N	MET	372	109.440	6.898	-4.991	1.00	8.16	A	N
ATOM	1472	CA	MET	372	110.434	7.712	-4.297	1.00	9.85	A	C
ATOM	1473	CB	MET	372	109.813	8.981	-3.724	1.00	11.09	A	C
ATOM	1474	CG	MET	372	109.021	9.788	-4.723	1.00	16.38	A	C
ATOM	1475	SD	MET	372	108.367	11.377	-4.114	1.00	22.72	A	S
ATOM	1476	CE	MET	372	109.315	12.495	-5.192	1.00	17.83	A	C
ATOM	1477	C	MET	372	111.057	6.911	-3.175	1.00	10.58	A	C
ATOM	1478	O	MET	372	110.385	6.096	-2.554	1.00	12.02	A	O
ATOM	1479	N	LEU	373	112.354	7.118	-2.962	1.00	11.64	A	N
ATOM	1480	CA	LEU	373	113.118	6.441	-1.925	1.00	13.50	A	C
ATOM	1481	CB	LEU	373	114.618	6.707	-2.140	1.00	12.42	A	C
ATOM	1482	CG	LEU	373	115.722	6.060	-1.276	1.00	14.02	A	C
ATOM	1483	CD1	LEU	373	115.850	4.529	-1.455	1.00	12.91	A	C
ATOM	1484	CD2	LEU	373	117.029	6.703	-1.665	1.00	14.55	A	C
ATOM	1485	C	LEU	373	112.654	6.917	-0.537	1.00	16.01	A	C
ATOM	1486	O	LEU	373	112.512	8.118	-0.291	1.00	15.34	A	O
ATOM	1487	N	LYS	374	112.380	5.961	0.350	1.00	19.37	A	N
ATOM	1488	CA	LYS	374	111.926	6.271	1.692	1.00	23.51	A	C
ATOM	1489	CB	LYS	374	111.146	5.101	2.301	1.00	25.81	A	C
ATOM	1490	CG	LYS	374	109.644	5.148	2.012	1.00	29.53	A	C
ATOM	1491	CD	LYS	374	108.955	3.782	2.173	1.00	32.96	A	C
ATOM	1492	CE	LYS	374	108.660	3.412	3.628	1.00	34.73	A	C
ATOM	1493	NZ	LYS	374	107.474	4.124	4.213	1.00	35.20	A	N
ATOM	1494	C	LYS	374	113.021	6.747	2.637	1.00	25.80	A	C
ATOM	1495	O	LYS	374	112.723	7.115	3.775	1.00	29.55	A	O
ATOM	1496	N	ARG	375	114.275	6.740	2.183	1.00	25.50	A	N
ATOM	1497	CA	ARG	375	115.404	7.228	2.987	1.00	24.56	A	C
ATOM	1498	CB	ARG	375	115.237	8.726	3.245	1.00	28.02	A	C
ATOM	1499	CG	ARG	375	116.376	9.387	3.989	1.00	34.95	A	C
ATOM	1500	CD	ARG	375	115.997	10.783	4.514	1.00	39.06	A	C
ATOM	1501	NE	ARG	375	117.097	11.370	5.280	1.00	42.65	A	N
ATOM	1502	CZ	ARG	375	117.265	11.244	6.598	1.00	44.04	A	C
ATOM	1503	NH1	ARG	375	116.399	10.562	7.337	1.00	46.32	A	N
ATOM	1504	NH2	ARG	375	118.342	11.754	7.172	1.00	45.12	A	N
ATOM	1505	C	ARG	375	115.550	6.509	4.313	1.00	21.82	A	C
ATOM	1506	O	ARG	375	114.583	6.008	4.855	1.00	23.32	A	O
ATOM	1507	N	ARG	376	116.759	6.472	4.850	1.00	19.36	A	N
ATOM	1508	CA	ARG	376	116.990	5.798	6.123	1.00	18.01	A	C
ATOM	1509	CB	ARG	376	118.257	4.959	6.056	1.00	14.42	A	C
ATOM	1510	CG	ARG	376	118.658	4.341	7.358	1.00	9.26	A	C
ATOM	1511	CD	ARG	376	119.967	3.620	7.173	1.00	8.09	A	C
ATOM	1512	NE	ARG	376	119.818	2.374	6.432	1.00	6.37	A	N
ATOM	1513	CZ	ARG	376	119.401	1.241	6.986	1.00	7.28	A	C
ATOM	1514	NH1	ARG	376	119.092	1.216	8.286	1.00	4.16	A	N
ATOM	1515	NH2	ARG	376	119.310	0.135	6.250	1.00	4.49	A	N
ATOM	1516	C	ARG	376	117.068	6.775	7.288	1.00	19.33	A	C
ATOM	1517	O	ARG	376	117.673	7.848	7.177	1.00	20.13	A	O
ATOM	1518	N	ILE	377	116.470	6.393	8.411	1.00	19.02	A	N
ATOM	1519	CA	ILE	377	116.460	7.249	9.580	1.00	18.37	A	C
ATOM	1520	CB	ILE	377	115.155	7.116	10.343	1.00	17.02	A	C
ATOM	1521	CG2	ILE	377	115.038	8.221	11.359	1.00	17.20	A	C
ATOM	1522	CG1	ILE	377	113.980	7.189	9.373	1.00	16.72	A	C
ATOM	1523	CD1	ILE	377	113.994	8.433	8.521	1.00	16.41	A	C
ATOM	1524	C	ILE	377	117.620	6.989	10.520	1.00	20.84	A	C
ATOM	1525	O	ILE	377	117.731	5.927	11.125	1.00	21.70	A	O
ATOM	1526	N	MET	378	118.493	7.979	10.625	1.00	22.63	A	N
ATOM	1527	CA	MET	378	119.653	7.919	11.495	1.00	23.14	A	C
ATOM	1528	CB	MET	378	120.790	8.692	10.839	1.00	28.82	A	C
ATOM	1529	CG	MET	378	121.167	8.179	9.482	1.00	36.02	A	C
ATOM	1530	SD	MET	378	121.843	6.540	9.653	1.00	46.74	A	S
ATOM	1531	CE	MET	378	123.574	6.967	10.012	1.00	45.06	A	C



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ATOM	1532	C	MET	378	119.267	8.614	12.801	1.00	22.08	A	C
ATOM	1533	O	MET	378	118.268	9.323	12.852	1.00	23.24	A	O
ATOM	1534	N	PRO	379	120.044	8.410	13.878	1.00	19.69	A	N
ATOM	1535	CD	PRO	379	121.114	7.409	14.023	1.00	18.83	A	C
ATOM	1536	CA	PRO	379	119.760	9.042	15.171	1.00	16.77	A	C
ATOM	1537	CB	PRO	379	120.889	8.528	16.042	1.00	15.84	A	C
ATOM	1538	CG	PRO	379	121.110	7.167	15.505	1.00	17.28	A	C
ATOM	1539	C	PRO	379	119.764	10.574	15.110	1.00	16.51	A	C
ATOM	1540	O	PRO	379	119.140	11.232	15.942	1.00	16.67	A	O
ATOM	1541	N	GLU	380	120.448	11.141	14.123	1.00	16.79	A	N
ATOM	1542	CA	GLU	380	120.500	12.588	13.980	1.00	20.45	A	C
ATOM	1543	CB	GLU	380	121.648	13.009	13.073	1.00	25.31	A	C
ATOM	1544	CG	GLU	380	123.030	12.795	13.653	1.00	30.79	A	C
ATOM	1545	CD	GLU	380	123.384	11.332	13.780	1.00	34.44	A	C
ATOM	1546	OE1	GLU	380	123.289	10.607	12.763	1.00	36.23	A	O
ATOM	1547	OE2	GLU	380	123.753	10.909	14.895	1.00	36.52	A	O
ATOM	1548	C	GLU	380	119.198	13.167	13.440	1.00	21.60	A	C
ATOM	1549	O	GLU	380	119.114	14.359	13.129	1.00	23.59	A	O
ATOM	1550	N	ASP	381	118.193	12.310	13.309	1.00	20.58	A	N
ATOM	1551	CA	ASP	381	116.882	12.708	12.830	1.00	18.51	A	C
ATOM	1552	CB	ASP	381	116.437	11.794	11.697	1.00	21.26	A	C
ATOM	1553	CG	ASP	381	117.370	11.815	10.529	1.00	23.36	A	C
ATOM	1554	OD1	ASP	381	117.652	12.933	10.044	1.00	25.70	A	O
ATOM	1555	OD2	ASP	381	117.797	10.715	10.092	1.00	23.73	A	O
ATOM	1556	C	ASP	381	115.894	12.529	13.964	1.00	17.41	A	C
ATOM	1557	O	ASP	381	114.795	13.095	13.948	1.00	20.11	A	O
ATOM	1558	N	ILE	382	116.260	11.681	14.919	1.00	14.10	A	N
ATOM	1559	CA	ILE	382	115.399	11.385	16.050	1.00	10.55	A	C
ATOM	1560	CB	ILE	382	115.773	10.054	16.685	1.00	7.81	A	C
ATOM	1561	CG2	ILE	382	114.819	9.740	17.802	1.00	7.37	A	C
ATOM	1562	CG1	ILE	382	115.740	8.949	15.632	1.00	2.19	A	C
ATOM	1563	CD1	ILE	382	114.422	8.797	14.982	1.00	1.00	A	C
ATOM	1564	C	ILE	382	115.401	12.468	17.110	1.00	10.49	A	C
ATOM	1565	O	ILE	382	116.439	13.052	17.399	1.00	12.40	A	O
ATOM	1566	N	ILE	383	114.212	12.775	17.624	1.00	8.57	A	N
ATOM	1567	CA	ILE	383	114.016	13.780	18.667	1.00	7.16	A	C
ATOM	1568	CB	ILE	383	112.963	14.843	18.257	1.00	5.69	A	C
ATOM	1569	CG2	ILE	383	112.731	15.850	19.378	1.00	1.00	A	C
ATOM	1570	CG1	ILE	383	113.390	15.530	16.973	1.00	4.32	A	C
ATOM	1571	CD1	ILE	383	112.491	16.636	16.590	1.00	8.30	A	C
ATOM	1572	C	ILE	383	113.455	12.996	19.836	1.00	8.29	A	C
ATOM	1573	O	ILE	383	112.355	12.454	19.742	1.00	9.21	A	O
ATOM	1574	N	ILE	384	114.211	12.921	20.926	1.00	8.27	A	N
ATOM	1575	CA	ILE	384	113.775	12.176	22.095	1.00	8.14	A	C
ATOM	1576	CB	ILE	384	114.972	11.569	22.833	1.00	8.09	A	C
ATOM	1577	CG2	ILE	384	114.547	10.984	24.179	1.00	8.62	A	C
ATOM	1578	CG1	ILE	384	115.592	10.483	21.966	1.00	8.08	A	C
ATOM	1579	CD1	ILE	384	114.611	9.420	21.615	1.00	8.59	A	C
ATOM	1580	C	ILE	384	112.995	13.031	23.056	1.00	9.28	A	C
ATOM	1581	O	ILE	384	113.436	14.112	23.412	1.00	12.92	A	O
ATOM	1582	N	ASN	385	111.816	12.562	23.448	1.00	10.10	A	N
ATOM	1583	CA	ASN	385	110.994	13.279	24.411	1.00	10.81	A	C
ATOM	1584	CB	ASN	385	109.584	13.503	23.887	1.00	6.62	A	C
ATOM	1585	CG	ASN	385	108.750	14.316	24.838	1.00	5.04	A	C
ATOM	1586	OD1	ASN	385	109.282	15.058	25.640	1.00	5.28	A	O
ATOM	1587	ND2	ASN	385	107.444	14.167	24.772	1.00	5.04	A	N
ATOM	1588	C	ASN	385	110.917	12.455	25.686	1.00	14.45	A	C
ATOM	1589	O	ASN	385	110.536	11.288	25.649	1.00	16.45	A	O
ATOM	1590	N	CYS	386	111.278	13.059	26.811	1.00	18.28	A	N
ATOM	1591	CA	CYS	386	111.228	12.360	28.093	1.00	22.66	A	C
ATOM	1592	CB	CYS	386	112.394	11.367	28.201	1.00	23.96	A	C
ATOM	1593	SG	CYS	386	114.044	12.094	28.279	1.00	26.00	A	S
ATOM	1594	C	CYS	386	111.243	13.342	29.268	1.00	24.79	A	C

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ATOM	1595	O	CYS	386	111.458	14.539	29.073	1.00	25.07	A	O
ATOM	1596	N	SER	387	110.986	12.838	30.476	1.00	27.25	A	N
ATOM	1597	CA	SER	387	110.977	13.669	31.686	1.00	29.87	A	C
ATOM	1598	CB	SER	387	110.391	12.889	32.860	1.00	30.42	A	C
ATOM	1599	OG	SER	387	110.370	13.688	34.030	1.00	30.89	A	O
ATOM	1600	C	SER	387	112.359	14.195	32.078	1.00	31.12	A	C
ATOM	1601	O	SER	387	113.382	13.608	31.719	1.00	31.67	A	O
ATOM	1602	N	LYS	388	112.377	15.282	32.848	1.00	33.06	A	N
ATOM	1603	CA	LYS	388	113.628	15.910	33.292	1.00	34.81	A	C
ATOM	1604	CB	LYS	388	113.343	17.266	33.956	1.00	36.74	A	C
ATOM	1605	CG	LYS	388	112.655	18.269	33.038	1.00	42.56	A	C
ATOM	1606	CD	LYS	388	112.242	19.568	33.760	1.00	46.10	A	C
ATOM	1607	CE	LYS	388	113.401	20.562	33.941	1.00	47.06	A	C
ATOM	1608	NZ	LYS	388	113.913	21.135	32.658	1.00	47.62	A	N
ATOM	1609	C	LYS	388	114.441	15.033	34.243	1.00	34.15	A	C
ATOM	1610	O	LYS	388	115.637	14.830	34.044	1.00	35.03	A	O
ATOM	1611	N	ASP	389	113.784	14.502	35.264	1.00	32.55	A	N
ATOM	1612	CA	ASP	389	114.446	13.662	36.250	1.00	32.09	A	C
ATOM	1613	CB	ASP	389	113.668	13.723	37.566	1.00	34.29	A	C
ATOM	1614	CG	ASP	389	112.168	13.547	37.375	1.00	35.50	A	C
ATOM	1615	OD1	ASP	389	111.399	13.889	38.300	1.00	36.08	A	O
ATOM	1616	OD2	ASP	389	111.754	13.062	36.305	1.00	37.73	A	O
ATOM	1617	C	ASP	389	114.660	12.207	35.814	1.00	30.45	A	C
ATOM	1618	O	ASP	389	115.172	11.383	36.570	1.00	29.42	A	O
ATOM	1619	N	ALA	390	114.268	11.898	34.588	1.00	29.36	A	N
ATOM	1620	CA	ALA	390	114.415	10.553	34.058	1.00	28.14	A	C
ATOM	1621	CB	ALA	390	113.266	10.238	33.111	1.00	28.32	A	C
ATOM	1622	C	ALA	390	115.747	10.370	33.341	1.00	27.18	A	C
ATOM	1623	O	ALA	390	116.391	11.336	32.932	1.00	25.45	A	O
ATOM	1624	N	LYS	391	116.137	9.110	33.182	1.00	26.92	A	N
ATOM	1625	CA	LYS	391	117.376	8.739	32.508	1.00	26.10	A	C
ATOM	1626	CB	LYS	391	117.785	7.331	32.944	1.00	25.65	A	C
ATOM	1627	CG	LYS	391	119.048	6.819	32.300	1.00	27.26	A	C
ATOM	1628	CD	LYS	391	119.395	5.416	32.791	1.00	29.12	A	C
ATOM	1629	CE	LYS	391	120.602	4.894	32.056	1.00	28.16	A	C
ATOM	1630	NZ	LYS	391	121.640	5.971	32.001	1.00	31.32	A	N
ATOM	1631	C	LYS	391	117.190	8.805	30.986	1.00	25.41	A	C
ATOM	1632	O	LYS	391	116.352	8.099	30.411	1.00	26.83	A	O
ATOM	1633	N	VAL	392	117.970	9.664	30.341	1.00	24.06	A	N
ATOM	1634	CA	VAL	392	117.897	9.845	28.893	1.00	24.13	A	C
ATOM	1635	CB	VAL	392	118.642	11.129	28.490	1.00	22.15	A	C
ATOM	1636	CG1	VAL	392	118.506	11.383	27.018	1.00	21.56	A	C
ATOM	1637	CG2	VAL	392	118.091	12.300	29.269	1.00	22.76	A	C
ATOM	1638	C	VAL	392	118.455	8.648	28.110	1.00	25.27	A	C
ATOM	1639	O	VAL	392	119.546	8.165	28.408	1.00	26.02	A	O
ATOM	1640	N	PRO	393	117.710	8.145	27.103	1.00	25.60	A	N
ATOM	1641	CD	PRO	393	116.432	8.639	26.554	1.00	27.40	A	C
ATOM	1642	CA	PRO	393	118.203	7.005	26.327	1.00	25.90	A	C
ATOM	1643	CB	PRO	393	117.086	6.769	25.305	1.00	26.21	A	C
ATOM	1644	CG	PRO	393	116.467	8.120	25.135	1.00	26.17	A	C
ATOM	1645	C	PRO	393	119.516	7.367	25.648	1.00	27.08	A	C
ATOM	1646	O	PRO	393	119.640	8.435	25.053	1.00	27.93	A	O
ATOM	1647	N	SER	394	120.509	6.499	25.814	1.00	27.02	A	N
ATOM	1648	CA	SER	394	121.839	6.687	25.238	1.00	24.95	A	C
ATOM	1649	CB	SER	394	122.831	5.728	25.924	1.00	26.54	A	C
ATOM	1650	OG	SER	394	124.184	6.074	25.659	1.00	28.19	A	O
ATOM	1651	C	SER	394	121.769	6.404	23.731	1.00	23.44	A	C
ATOM	1652	O	SER	394	121.322	5.349	23.309	1.00	21.82	A	O
ATOM	1653	N	PRO	395	122.173	7.371	22.902	1.00	22.96	A	N
ATOM	1654	CD	PRO	395	122.713	8.709	23.189	1.00	22.28	A	C
ATOM	1655	CA	PRO	395	122.119	7.135	21.462	1.00	19.98	A	C
ATOM	1656	CB	PRO	395	122.540	8.478	20.883	1.00	21.20	A	C
ATOM	1657	CG	PRO	395	123.461	9.014	21.920	1.00	22.04	A	C

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ATOM	1658	C	PRO	395	123.071	6.031	21.054	1.00	20.98	A	O
ATOM	1659	O	PRO	395	124.066	5.784	21.729	1.00	20.56	A	O
ATOM	1660	N	PRO	396	122.761	5.335	19.949	1.00	22.72	A	N
ATOM	1661	CD	PRO	396	121.607	5.568	19.058	1.00	18.55	A	C
ATOM	1662	CA	PRO	396	123.602	4.246	19.448	1.00	18.13	A	C
ATOM	1663	CB	PRO	396	122.944	3.915	18.122	1.00	20.71	A	C
ATOM	1664	CG	PRO	396	121.495	4.272	18.365	1.00	20.59	A	C
ATOM	1665	C	PRO	396	125.015	4.779	19.237	1.00	19.59	A	C
ATOM	1666	O	PRO	396	125.191	5.959	18.970	1.00	20.98	A	O
ATOM	1667	N	PRO	397	126.040	3.927	19.403	1.00	22.03	A	N
ATOM	1668	CD	PRO	397	125.911	2.544	19.891	1.00	20.83	A	C
ATOM	1669	CA	PRO	397	127.460	4.267	19.244	1.00	18.99	A	C
ATOM	1670	CB	PRO	397	128.135	2.904	19.325	1.00	18.39	A	C
ATOM	1671	CG	PRO	397	127.322	2.237	20.359	1.00	19.93	A	C
ATOM	1672	C	PRO	397	127.863	5.017	17.968	1.00	19.53	A	C
ATOM	1673	O	PRO	397	127.626	4.536	16.850	1.00	20.11	A	O
ATOM	1674	N	GLY	398	128.495	6.180	18.169	1.00	19.28	A	N
ATOM	1675	CA	GLY	398	128.972	7.017	17.081	1.00	18.38	A	C
ATOM	1676	C	GLY	398	127.950	8.024	16.608	1.00	18.91	A	C
ATOM	1677	O	GLY	398	128.173	8.771	15.650	1.00	19.96	A	O
ATOM	1678	N	HIS	399	126.828	8.067	17.314	1.00	19.50	A	N
ATOM	1679	CA	HIS	399	125.739	8.955	16.959	1.00	19.92	A	C
ATOM	1680	CB	HIS	399	124.560	8.140	16.425	1.00	19.61	A	C
ATOM	1681	CG	HIS	399	124.805	7.547	15.076	1.00	19.69	A	C
ATOM	1682	CD2	HIS	399	124.493	7.992	13.838	1.00	21.71	A	C
ATOM	1683	ND1	HIS	399	125.475	6.359	14.897	1.00	20.45	A	N
ATOM	1684	CE1	HIS	399	125.568	6.096	13.608	1.00	21.60	A	C
ATOM	1685	NE2	HIS	399	124.979	7.073	12.943	1.00	23.79	A	N
ATOM	1686	C	HIS	399	125.274	9.852	18.090	1.00	20.31	A	C
ATOM	1687	O	HIS	399	125.704	9.733	19.234	1.00	21.14	A	O
ATOM	1688	N	LYS	400	124.360	10.744	17.751	1.00	20.32	A	N
ATOM	1689	CA	LYS	400	123.823	11.679	18.708	1.00	19.78	A	C
ATOM	1690	CB	LYS	400	124.704	12.938	18.714	1.00	24.50	A	C
ATOM	1691	CG	LYS	400	124.383	13.972	19.795	1.00	31.48	A	C
ATOM	1692	CD	LYS	400	125.495	15.044	19.904	1.00	35.70	A	C
ATOM	1693	CE	LYS	400	126.728	14.560	20.679	1.00	35.98	A	C
ATOM	1694	NZ	LYS	400	126.469	14.522	22.151	1.00	38.64	A	N
ATOM	1695	C	LYS	400	122.394	11.984	18.270	1.00	16.47	A	C
ATOM	1696	O	LYS	400	122.087	11.969	17.084	1.00	14.95	A	O
ATOM	1697	N	TRP	401	121.504	12.158	19.236	1.00	14.37	A	N
ATOM	1698	CA	TRP	401	120.						

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ATOM	1721	CA	GLU	403	117.644	16.928	20.366	1.00	17.50	A	C
ATOM	1722	CB	GLU	403	116.853	18.196	19.998	1.00	17.87	A	C
ATOM	1723	CG	GLU	403	115.357	17.977	19.892	1.00	19.64	A	C
ATOM	1724	CD	GLU	403	114.550	19.268	19.831	1.00	22.46	A	C
ATOM	1725	OE1	GLU	403	114.504	19.891	18.738	1.00	22.74	A	O
ATOM	1726	OE2	GLU	403	113.928	19.632	20.864	1.00	21.01	A	O
ATOM	1727	C	GLU	403	116.853	16.142	21.408	1.00	16.95	A	C
ATOM	1728	O	GLU	403	116.131	15.200	21.069	1.00	18.74	A	O
ATOM	1729	N	VAL	404	116.984	16.534	22.671	1.00	14.59	A	N
ATOM	1730	CA	VAL	404	116.259	15.876	23.737	1.00	13.13	A	C
ATOM	1731	CB	VAL	404	117.209	15.263	24.770	1.00	11.02	A	C
ATOM	1732	CG1	VAL	404	116.455	14.872	26.018	1.00	12.35	A	C
ATOM	1733	CG2	VAL	404	117.864	14.031	24.186	1.00	12.03	A	C
ATOM	1734	C	VAL	404	115.326	16.868	24.405	1.00	14.24	A	C
ATOM	1735	O	VAL	404	115.772	17.881	24.937	1.00	14.05	A	O
ATOM	1736	N	ARG	405	114.022	16.625	24.311	1.00	15.43	A	N
ATOM	1737	CA	ARG	405	113.102	17.531	24.956	1.00	16.99	A	C
ATOM	1738	CB	ARG	405	112.391	18.477	23.979	1.00	17.33	A	C
ATOM	1739	CG	ARG	405	111.385	17.945	23.009	1.00	13.90	A	C
ATOM	1740	CD	ARG	405	110.946	19.178	22.213	1.00	12.54	A	C
ATOM	1741	NE	ARG	405	109.983	18.913	21.149	1.00	12.24	A	N
ATOM	1742	CZ	ARG	405	110.268	18.952	19.850	1.00	10.60	A	C
ATOM	1743	NH1	ARG	405	111.489	19.243	19.438	1.00	8.34	A	N
ATOM	1744	NH2	ARG	405	109.321	18.710	18.961	1.00	12.59	A	N
ATOM	1745	C	ARG	405	112.168	16.929	25.967	1.00	18.82	A	C
ATOM	1746	O	ARG	405	111.935	15.722	25.983	1.00	18.86	A	O
ATOM	1747	N	HIS	406	111.689	17.798	26.850	1.00	20.36	A	N
ATOM	1748	CA	HIS	406	110.820	17.412	27.938	1.00	22.70	A	C
ATOM	1749	CB	HIS	406	111.472	17.864	29.245	1.00	24.72	A	C
ATOM	1750	CG	HIS	406	112.962	17.689	29.260	1.00	28.01	A	C
ATOM	1751	CD2	HIS	406	113.962	18.536	28.918	1.00	29.49	A	C
ATOM	1752	ND1	HIS	406	113.571	16.503	29.614	1.00	29.97	A	N
ATOM	1753	CE1	HIS	406	114.881	16.627	29.486	1.00	29.33	A	C
ATOM	1754	NE2	HIS	406	115.144	17.850	29.065	1.00	30.28	A	N
ATOM	1755	C	HIS	406	109.453	18.049	27.764	1.00	23.45	A	C
ATOM	1756	O	HIS	406	109.095	18.974	28.487	1.00	26.33	A	O
ATOM	1757	N	ASP	407	108.686	17.565	26.798	1.00	22.73	A	N
ATOM	1758	CA	ASP	407	107.381	18.136	26.564	1.00	23.96	A	C
ATOM	1759	CB	ASP	407	107.156	18.369	25.075	1.00	23.71	A	C
ATOM	1760	CG	ASP	407	106.015	19.335	24.797	1.00	24.63	A	C
ATOM	1761	OD1	ASP	407	105.255	19.662	25.730	1.00	24.85	A	O
ATOM	1762	OD2	ASP	407	105.883	19.779	23.635	1.00	24.92	A	O
ATOM	1763	C	ASP	407	106.286	17.268	27.136	1.00	26.23	A	C
ATOM	1764	O	ASP	407	105.907	16.260	26.547	1.00	29.21	A	O
ATOM	1765	N	ASN	408	105.779	17.670	28.295	1.00	27.60	A	N
ATOM	1766	CA	ASN	408	104.708	16.946	28.969	1.00	27.40	A	C
ATOM	1767	CB	ASN	408	104.763	17.213	30.471	1.00	27.99	A	C
ATOM	1768	CG	ASN	408	104.620	18.687	30.805	1.00	30.70	A	C
ATOM	1769	OD1	ASN	408	105.267	19.548	30.198	1.00	30.93	A	O
ATOM	1770	ND2	ASN	408	103.765	18.988	31.773	1.00	32.46	A	N
ATOM	1771	C	ASN	408	103.334	17.328	28.412	1.00	27.01	A	C
ATOM	1772	O	ASN	408	102.319	16.823	28.879	1.00	28.76	A	O
ATOM	1773	N	LYS	409	103.302	18.234	27.435	1.00	25.94	A	N
ATOM	1774	CA	LYS	409	102.041	18.653	26.815	1.00	25.06	A	C
ATOM	1775	CB	LYS	409	102.122	20.070	26.209	1.00	28.34	A	C
ATOM	1776	CG	LYS	409	102.518	21.196	27.158	1.00	31.83	A	C
ATOM	1777	CD	LYS	409	101.607	21.320	28.363	1.00	33.80	A	C
ATOM	1778	CE	LYS	409	102.290	22.170	29.427	1.00	36.15	A	C
ATOM	1779	NZ	LYS	409	101.525	22.189	30.699	1.00	38.83	A	N
ATOM	1780	C	LYS	409	101.684	17.682	25.703	1.00	21.87	A	C
ATOM	1781	O	LYS	409	100.563	17.693	25.204	1.00	22.66	A	O
ATOM	1782	N	VAL	410	102.661	16.895	25.269	1.00	18.09	A	N
ATOM	1783	CA	VAL	410	102.420	15.926	24.223	1.00	15.53	A	C

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ATOM	1784	CB	VAL	410	103.430	16.014	23.077	1.00	16.42	A	C
ATOM	1785	CG1	VAL	410	103.336	17.367	22.442	1.00	17.60	A	C
ATOM	1786	CG2	VAL	410	104.845	15.695	23.552	1.00	15.34	A	C
ATOM	1787	C	VAL	410	102.342	14.502	24.727	1.00	14.60	A	C
ATOM	1788	O	VAL	410	102.498	14.234	25.908	1.00	14.85	A	O
ATOM	1789	N	THR	411	102.206	13.593	23.776	1.00	12.58	A	N
ATOM	1790	CA	THR	411	102.014	12.183	24.030	1.00	10.09	A	C
ATOM	1791	CB	THR	411	100.672	11.763	23.337	1.00	10.51	A	C
ATOM	1792	OG1	THR	411	99.609	11.796	24.288	1.00	10.83	A	O
ATOM	1793	CG2	THR	411	100.746	10.407	22.664	1.00	11.52	A	C
ATOM	1794	C	THR	411	103.137	11.281	23.566	1.00	9.64	A	C
ATOM	1795	O	THR	411	103.301	10.202	24.111	1.00	10.38	A	O
ATOM	1796	N	TRP	412	103.950	11.758	22.629	1.00	8.40	A	N
ATOM	1797	CA	TRP	412	105.014	10.954	22.035	1.00	7.73	A	C
ATOM	1798	CB	TRP	412	105.263	11.450	20.619	1.00	7.48	A	C
ATOM	1799	CG	TRP	412	105.582	12.907	20.515	1.00	6.43	A	C
ATOM	1800	CD2	TRP	412	106.877	13.490	20.526	1.00	6.09	A	C
ATOM	1801	CE2	TRP	412	106.711	14.889	20.366	1.00	6.68	A	C
ATOM	1802	CE3	TRP	412	108.168	12.972	20.655	1.00	4.69	A	C
ATOM	1803	CD1	TRP	412	104.700	13.939	20.352	1.00	9.47	A	C
ATOM	1804	NE1	TRP	412	105.370	15.137	20.260	1.00	7.03	A	N
ATOM	1805	CZ2	TRP	412	107.790	15.773	20.334	1.00	5.46	A	C
ATOM	1806	CZ3	TRP	412	109.234	13.847	20.623	1.00	9.34	A	C
ATOM	1807	CH2	TRP	412	109.038	15.242	20.464	1.00	5.98	A	C
ATOM	1808	C	TRP	412	106.352	10.737	22.741	1.00	9.27	A	C
ATOM	1809	O	TRP	412	106.834	11.620	23.433	1.00	11.81	A	O
ATOM	1810	N	LEU	413	106.964	9.567	22.516	1.00	8.11	A	N
ATOM	1811	CA	LEU	413	108.264	9.229	23.104	1.00	8.42	A	C
ATOM	1812	CB	LEU	413	108.385	7.737	23.418	1.00	6.20	A	C
ATOM	1813	CG	LEU	413	107.301	7.030	24.209	1.00	7.10	A	C
ATOM	1814	CD1	LEU	413	107.933	5.871	24.928	1.00	7.28	A	C
ATOM	1815	CD2	LEU	413	106.660	7.975	25.187	1.00	5.69	A	C
ATOM	1816	C	LEU	413	109.392	9.562	22.148	1.00	10.42	A	C
ATOM	1817	O	LEU	413	110.461	10.008	22.571	1.00	11.64	A	O
ATOM	1818	N	VAL	414	109.174	9.250	20.870	1.00	11.31	A	N
ATOM	1819	CA	VAL	414	110.152	9.479	19.801	1.00	10.31	A	C
ATOM	1820	CB	VAL	414	110.794	8.156	19.354	1.00	8.25	A	C
ATOM	1821	CG1	VAL	414	111.814	8.403	18.279	1.00	9.40	A	C
ATOM	1822	CG2	VAL	414	111.411	7.431	20.526	1.00	8.82	A	C
ATOM	1823	C	VAL	414	109.472	10.094	18.570	1.00	12.06	A	C
ATOM	1824	O	VAL	414	108.384	9.672	18.163	1.00	14.29	A	O
ATOM	1825	N	SER	415	110.131	11.073	17.963	1.00	12.33	A	N
ATOM	1826	CA	SER	415	109.596	11.729	16.784	1.00	12.19	A	C
ATOM	1827	CB	SER	415	108.884	13.011	17.185	1.00	13.71	A	C
ATOM	1828	OG	SER	415	108.848	13.929	16.111	1.00	17.92	A	O
ATOM	1829	C	SER	415	110.666	12.041	15.764	1.00	12.20	A	C
ATOM	1830	O	SER	415	111.824	12.220	16.104	1.00	12.49	A	O
ATOM	1831	N	TRP	416	110.261	12.106	14.503	1.00	15.09	A	N
ATOM	1832	CA	TRP	416	111.180	12.430	13.414	1.00	18.68	A	C
ATOM	1833	CB	TRP	416	112.032	11.222	13.027	1.00	18.80	A	C
ATOM	1834	CG	TRP	416	111.286	10.099	12.369	1.00	18.25	A	C
ATOM	1835	CD2	TRP	416	110.717	8.963	13.015	1.00	18.19	A	C
ATOM	1836	CE2	TRP	416	110.246	8.102	12.006	1.00	18.78	A	C
ATOM	1837	CE3	TRP	416	110.568	8.582	14.354	1.00	19.32	A	C
ATOM	1838	CD1	TRP	416	111.124	9.897	11.033	1.00	17.80	A	C
ATOM	1839	NE1	TRP	416	110.507	8.697	10.802	1.00	18.78	A	N
ATOM	1840	CZ2	TRP	416	109.638	6.879	12.292	1.00	19.56	A	C
ATOM	1841	CZ3	TRP	416	109.964	7.369	14.637	1.00	20.16	A	C
ATOM	1842	CH2	TRP	416	109.507	6.531	13.610	1.00	19.98	A	C
ATOM	1843	C	TRP	416	110.429	12.969	12.206	1.00	20.47	A	C
ATOM	1844	O	TRP	416	109.260	13.309	12.304	1.00	21.19	A	O
ATOM	1845	N	THR	417	111.104	13.036	11.069	1.00	24.20	A	N
ATOM	1846	CA	THR	417	110.496	13.549	9.855	1.00	29.60	A	C

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ATOM	1847	CB	THR	417	110.982	14.981	9.571	1.00	29.01	A	C
ATOM	1848	OG1	THR	417	110.650	15.823	10.681	1.00	32.24	A	O
ATOM	1849	CG2	THR	417	110.329	15.531	8.327	1.00	29.87	A	C
ATOM	1850	C	THR	417	110.799	12.675	8.640	1.00	33.85	A	C
ATOM	1851	O	THR	417	111.963	12.374	8.350	1.00	36.25	A	O
ATOM	1852	N	GLU	418	109.743	12.268	7.939	1.00	37.36	A	N
ATOM	1853	CA	GLU	418	109.871	11.454	6.739	1.00	39.93	A	C
ATOM	1854	CB	GLU	418	108.602	10.622	6.538	1.00	43.69	A	C
ATOM	1855	CG	GLU	418	108.709	9.192	7.085	1.00	51.12	A	C
ATOM	1856	CD	GLU	418	109.320	8.185	6.092	1.00	55.01	A	C
ATOM	1857	OE1	GLU	418	108.579	7.269	5.640	1.00	54.97	A	O
ATOM	1858	OE2	GLU	418	110.535	8.300	5.778	1.00	55.61	A	O
ATOM	1859	C	GLU	418	110.132	12.344	5.519	1.00	39.47	A	C
ATOM	1860	O	GLU	418	109.522	13.401	5.373	1.00	39.52	A	O
ATOM	1861	N	ASN	419	111.023	11.893	4.638	1.00	39.42	A	N
ATOM	1862	CA	ASN	419	111.398	12.627	3.422	1.00	39.30	A	C
ATOM	1863	CB	ASN	419	112.694	12.054	2.835	1.00	40.29	A	C
ATOM	1864	CG	ASN	419	112.619	10.548	2.605	1.00	40.57	A	C
ATOM	1865	OD1	ASN	419	112.735	10.067	1.476	1.00	39.90	A	O
ATOM	1866	ND2	ASN	419	112.439	9.796	3.686	1.00	40.82	A	N
ATOM	1867	C	ASN	419	110.355	12.713	2.307	1.00	38.55	A	C
ATOM	1868	O	ASN	419	110.439	13.602	1.467	1.00	39.23	A	O
ATOM	1869	N	ILE	420	109.400	11.787	2.284	1.00	36.99	A	N
ATOM	1870	CA	ILE	420	108.355	11.760	1.257	1.00	36.19	A	C
ATOM	1871	CB	ILE	420	107.563	10.448	1.335	1.00	36.07	A	C
ATOM	1872	CG2	ILE	420	106.436	10.447	0.329	1.00	37.17	A	C
ATOM	1873	CG1	ILE	420	108.493	9.267	1.092	1.00	36.94	A	C
ATOM	1874	CD1	ILE	420	109.229	9.346	-0.206	1.00	36.92	A	C
ATOM	1875	C	ILE	420	107.356	12.932	1.268	1.00	35.89	A	C
ATOM	1876	O	ILE	420	107.297	13.717	0.323	1.00	35.25	A	O
ATOM	1877	N	GLN	421	106.527	12.997	2.305	1.00	35.59	A	N
ATOM	1878	CA	GLN	421	105.526	14.048	2.432	1.00	34.51	A	C
ATOM	1879	CB	GLN	421	104.359	13.879	3.294	1.00	34.06	A	C
ATOM	1880	CG	GLN	421	103.864	12.131	3.018	1.00	34.32	A	C
ATOM	1881	CD	GLN	421	102.976	12.116	1.821	1.00	32.26	A	C
ATOM	1882	OE1	GLN	421	102.693	13.139	1.191	1.00	30.62	A	O
ATOM	1883	NE2	GLN	421	102.508	10.911	1.497	1.00	31.33	A	N
ATOM	1884	C	GLN	421	106.128	15.245	3.133	1.00	34.51	A	C
ATOM	1885	O	GLN	421	105.892	16.388	2.747	1.00	35.87	A	O
ATOM	1886	N	GLY	422	106.883	14.966	4.190	1.00	33.63	A	N
ATOM	1887	CA	GLY	422	107.486	16.023	4.982	1.00	32.55	A	C
ATOM	1888	C	GLY	422	106.778	16.074	6.326	1.00	31.04	A	C
ATOM	1889	O	GLY	422	106.971	16.997	7.121	1.00	30.96	A	O
ATOM	1890	N	SER	423	105.939	15.070	6.566	1.00	28.83	A	N
ATOM	1891	CA	SER	423	105.187	14.964	7.806	1.00	26.64	A	C
ATOM	1892	CB	SER	423	104.004	13.998	7.633	1.00	26.44	A	C
ATOM	1893	OG	SER	423	104.421	12.742	7.117	1.00	27.56	A	O
ATOM	1894	C	SER	423	106.105	14.484	8.924	1.00	24.87	A	C
ATOM	1895	O	SER	423	107.256	14.115	8.676	1.00	24.74	A	O
ATOM	1896	N	ILE	424	105.604	14.527	10.155	1.00	22.07	A	N
ATOM	1897	CA	ILE	424	106.373	14.082	11.302	1.00	19.20	A	C
ATOM	1898	CB	ILE	424	106.295	15.096	12.460	1.00	19.28	A	C
ATOM	1899	CG2	ILE	424	106.868	14.490	13.733	1.00	18.85	A	C
ATOM	1900	CG1	ILE	424	107.060	16.370	12.101	1.00	19.01	A	C
ATOM	1901	CD1	ILE	424	106.989	17.420	13.158	1.00	17.43	A	C
ATOM	1902	C	ILE	424	105.814	12.757	11.773	1.00	18.77	A	C
ATOM	1903	O	ILE	424	104.607	12.618	11.962	1.00	19.43	A	O
ATOM	1904	N	LYS	425	106.679	11.764	11.927	1.00	17.73	A	N
ATOM	1905	CA	LYS	425	106.215	10.471	12.406	1.00	17.36	A	C
ATOM	1906	CB	LYS	425	106.694	9.343	11.485	1.00	17.29	A	C
ATOM	1907	CG	LYS	425	106.034	9.419	10.081	1.00	20.12	A	C
ATOM	1908	CD	LYS	425	106.373	8.213	9.194	1.00	22.40	A	C
ATOM	1909	CE	LYS	425	105.269	7.160	9.123	1.00	23.94	A	C

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ATOM	1910	NZ	LYS	425	104.294	7.408	8.020	1.00	23.25	A	N
ATOM	1911	C	LYS	425	106.586	10.278	13.884	1.00	16.30	A	C
ATOM	1912	O	LYS	425	107.605	10.787	14.339	1.00	18.56	A	O
ATOM	1913	N	TYR	426	105.696	9.638	14.643	1.00	13.59	A	N
ATOM	1914	CA	TYR	426	105.886	9.419	16.073	1.00	9.75	A	C
ATOM	1915	CB	TYR	426	104.751	10.086	16.838	1.00	8.52	A	C
ATOM	1916	CG	TYR	426	104.504	11.534	16.518	1.00	10.12	A	C
ATOM	1917	CD1	TYR	426	103.449	11.910	15.697	1.00	9.26	A	C
ATOM	1918	CE1	TYR	426	103.191	13.244	15.435	1.00	7.43	A	C
ATOM	1919	CD2	TYR	426	105.301	12.541	17.071	1.00	10.35	A	C
ATOM	1920	CE2	TYR	426	105.051	13.870	16.817	1.00	7.50	A	C
ATOM	1921	CZ	TYR	426	103.993	14.220	15.996	1.00	8.20	A	C
ATOM	1922	OH	TYR	426	103.744	15.554	15.732	1.00	8.53	A	O
ATOM	1923	C	TYR	426	105.900	7.953	16.528	1.00	10.28	A	C
ATOM	1924	O	TYR	426	105.455	7.033	15.824	1.00	6.62	A	O
ATOM	1925	N	ILE	427	106.382	7.768	17.752	1.00	10.25	A	N
ATOM	1926	CA	ILE	427	106.421	6.472	18.405	1.00	9.42	A	C
ATOM	1927	CB	ILE	427	107.836	6.043	18.804	1.00	6.65	A	C
ATOM	1928	CG2	ILE	427	107.764	4.786	19.660	1.00	6.21	A	C
ATOM	1929	CG1	ILE	427	108.689	5.809	17.561	1.00	7.55	A	C
ATOM	1930	CD1	ILE	427	109.991	5.059	17.824	1.00	6.60	A	C
ATOM	1931	C	ILE	427	105.635	6.700	19.679	1.00	11.78	A	C
ATOM	1932	O	ILE	427	106.153	7.275	20.632	1.00	13.73	A	O
ATOM	1933	N	MET	428	104.371	6.306	19.676	1.00	13.27	A	N
ATOM	1934	CA	MET	428	103.525	6.476	20.843	1.00	16.21	A	C
ATOM	1935	CB	MET	428	102.259	7.226	20.432	1.00	18.83	A	C
ATOM	1936	CG	MET	428	102.529	8.677	20.101	1.00	22.28	A	C
ATOM	1937	SD	MET	428	101.370	9.423	18.936	1.00	26.01	A	S
ATOM	1938	CE	MET	428	99.751	9.061	19.750	1.00	26.83	A	C
ATOM	1939	C	MET	428	103.205	5.127	21.519	1.00	18.14	A	C
ATOM	1940	O	MET	428	103.633	4.073	21.035	1.00	17.13	A	O
ATOM	1941	N	LEU	429	102.478	5.177	22.645	1.00	18.95	A	N
ATOM	1942	CA	LEU	429	102.097	3.993	23.420	1.00	18.83	A	C
ATOM	1943	CB	LEU	429	101.698	4.397	24.833	1.00	17.10	A	C
ATOM	1944	CG	LEU	429	102.782	5.093	25.662	1.00	18.40	A	C
ATOM	1945	CD1	LEU	429	102.350	5.209	27.120	1.00	19.32	A	C
ATOM	1946	CD2	LEU	429	104.078	4.321	25.575	1.00	17.64	A	C
ATOM	1947	C	LEU	429	100.970	3.190	22.786	1.00	21.62	A	C
ATOM	1948	O	LEU	429	100.109	3.751	22.102	1.00	22.22	A	O
ATOM	1949	N	ASN	430	100.966	1.879	23.028	1.00	24.11	A	N
ATOM	1950	CA	ASN	430	99.950	0.997	22.465	1.00	26.28	A	C
ATOM	1951	CB	ASN	430	100.375	-0.467	22.609	1.00	29.30	A	C
ATOM	1952	CG	ASN	430	99.839	-1.127	23.864	1.00	33.10	A	C
ATOM	1953	OD1	ASN	430	99.587	-2.330	23.869	1.00	36.39	A	O
ATOM	1954	ND2	ASN	430	99.682	-0.357	24.935	1.00	34.24	A	N
ATOM	1955	C	ASN	430	98.580	1.270	23.089	1.00	27.81	A	C
ATOM	1956	O	ASN	430	98.490	1.921	24.124	1.00	28.28	A	O
ATOM	1957	N	PRO	431	97.504	0.738	22.489	1.00	28.30	A	N
ATOM	1958	CD	PRO	431	97.523	-0.123	21.294	1.00	28.69	A	C
ATOM	1959	CA	PRO	431	96.130	0.921	22.962	1.00	28.56	A	C
ATOM	1960	CB	PRO	431	95.337	0.012	22.035	1.00	29.96	A	C
ATOM	1961	CG	PRO	431	96.134	0.041	20.767	1.00	29.66	A	C
ATOM	1962	C	PRO	431	95.846	0.593	24.423	1.00	29.27	A	C
ATOM	1963	O	PRO	431	94.999	1.238	25.037	1.00	30.29	A	O
ATOM	1964	N	SER	432	96.541	-0.409	24.965	1.00	29.08	A	N
ATOM	1965	CA	SER	432	96.372	-0.857	26.357	1.00	27.64	A	C
ATOM	1966	CB	SER	432	97.371	-1.961	26.685	1.00	28.39	A	C
ATOM	1967	OG	SER	432	97.527	-2.869	25.611	1.00	33.84	A	O
ATOM	1968	C	SER	432	96.592	0.231	27.387	1.00	26.52	A	C
ATOM	1969	O	SER	432	96.018	0.183	28.467	1.00	26.71	A	O
ATOM	1970	N	SER	433	97.439	1.199	27.045	1.00	25.62	A	N
ATOM	1971	CA	SER	433	97.815	2.293	27.933	1.00	24.45	A	C
ATOM	1972	CB	SER	433	99.027	3.043	27.362	1.00	25.80	A	C

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ATOM	1973	OG	SER	433	98.734	3.711	26.144	1.00	24.36	A	O
ATOM	1974	C	SER	433	96.749	3.292	28.341	1.00	23.80	A	C
ATOM	1975	O	SER	433	95.757	3.474	27.645	1.00	23.74	A	O
ATOM	1976	N	ARG	434	97.010	3.971	29.458	1.00	23.86	A	N
ATOM	1977	CA	ARG	434	96.119	4.982	30.026	1.00	23.72	A	C
ATOM	1978	CB	ARG	434	96.685	5.494	31.350	1.00	24.88	A	C
ATOM	1979	CG	ARG	434	95.719	6.351	32.124	1.00	29.89	A	C
ATOM	1980	CD	ARG	434	96.397	7.557	32.734	1.00	35.32	A	C
ATOM	1981	NE	ARG	434	96.818	8.528	31.725	1.00	39.91	A	N
ATOM	1982	CZ	ARG	434	98.039	9.063	31.661	1.00	43.24	A	C
ATOM	1983	NH1	ARG	434	98.975	8.722	32.544	1.00	43.51	A	N
ATOM	1984	NH2	ARG	434	98.325	9.955	30.719	1.00	44.09	A	N
ATOM	1985	C	ARG	434	95.940	6.161	29.075	1.00	21.94	A	C
ATOM	1986	O	ARG	434	94.838	6.452	28.629	1.00	21.34	A	O
ATOM	1987	N	ILE	435	97.046	6.823	28.766	1.00	20.88	A	N
ATOM	1988	CA	ILE	435	97.069	7.974	27.872	1.00	18.95	A	C
ATOM	1989	CB	ILE	435	98.532	8.305	27.456	1.00	18.20	A	C
ATOM	1990	CG2	ILE	435	99.096	7.222	26.563	1.00	17.72	A	C
ATOM	1991	CG1	ILE	435	98.602	9.657	26.758	1.00	17.87	A	C
ATOM	1992	CD1	ILE	435	98.125	10.800	27.612	1.00	19.19	A	C
ATOM	1993	C	ILE	435	96.190	7.763	26.634	1.00	18.66	A	C
ATOM	1994	O	ILE	435	95.455	8.666	26.225	1.00	16.98	A	O
ATOM	1995	N	LYS	436	96.231	6.548	26.086	1.00	18.74	A	N
ATOM	1996	CA	LYS	436	95.447	6.184	24.904	1.00	18.62	A	C
ATOM	1997	CB	LYS	436	96.125	5.046	24.141	1.00	19.41	A	C
ATOM	1998	CG	LYS	436	97.335	5.440	23.300	1.00	20.73	A	C
ATOM	1999	CD	LYS	436	96.942	5.786	21.874	1.00	24.77	A	C
ATOM	2000	CE	LYS	436	98.162	5.996	20.988	1.00	27.09	A	C
ATOM	2001	NZ	LYS	436	97.823	6.065	19.531	1.00	29.93	A	N
ATOM	2002	C	LYS	436	94.025	5.770	25.273	1.00	18.54	A	C
ATOM	2003	O	LYS	436	93.059	6.294	24.719	1.00	18.74	A	O
ATOM	2004	N	GLY	437	93.905	4.847	26.224	1.00	18.72	A	N
ATOM	2005	CA	GLY	437	92.601	4.367	26.651	1.00	19.73	A	C
ATOM	2006	C	GLY	437	91.681	5.451	27.179	1.00	21.21	A	C
ATOM	2007	O	GLY	437	90.464	5.369	27.057	1.00	19.91	A	O
ATOM	2008	N	GLU	438	92.269	6.490	27.752	1.00	24.52	A	N
ATOM	2009	CA	GLU	438	91.497	7.585	28.313	1.00	26.92	A	C
ATOM	2010	CB	GLU	438	92.402	8.457	29.161	1.00	31.10	A	C
ATOM	2011	CG	GLU	438	91.688	9.285	30.185	1.00	38.24	A	C
ATOM	2012	CD	GLU	438	92.660	10.034	31.074	1.00	42.69	A	C
ATOM	2013	OE1	GLU	438	93.292	9.395	31.948	1.00	43.62	A	O
ATOM	2014	OE2	GLU	438	92.803	11.261	30.885	1.00	45.08	A	O
ATOM	2015	C	GLU	438	90.905	8.397	27.191	1.00	26.61	A	C
ATOM	2016	O	GLU	438	89.750	8.794	27.261	1.00	25.33	A	O
ATOM	2017	N	LYS	439	91.704	8.624	26.149	1.00	27.58	A	N
ATOM	2018	CA	LYS	439	91.267	9.392	24.985	1.00	28.40	A	C
ATOM	2019	CB	LYS	439	92.468	9.788	24.111	1.00	25.66	A	C
ATOM	2020	CG	LYS	439	92.622	11.314	23.856	1.00	23.12	A	C
ATOM	2021	CD	LYS	439	92.109	11.721	22.450	1.00	23.11	A	C
ATOM	2022	CE	LYS	439	93.232	12.263	21.526	1.00	19.81	A	C
ATOM	2023	NZ	LYS	439	92.942	12.226	20.041	1.00	12.75	A	N
ATOM	2024	C	LYS	439	90.251	8.580	24.185	1.00	30.37	A	C
ATOM	2025	O	LYS	439	89.454	9.140	23.436	1.00	31.23	A	O
ATOM	2026	N	ASP	440	90.274	7.261	24.373	1.00	32.60	A	N
ATOM	2027	CA	ASP	440	89.350	6.358	23.694	1.00	33.85	A	C
ATOM	2028	CB	ASP	440	89.866	4.916	23.787	1.00	35.16	A	C
ATOM	2029	CG	ASP	440	89.347	4.014	22.659	1.00	37.99	A	C
ATOM	2030	OD1	ASP	440	89.299	4.475	21.496	1.00	38.50	A	O
ATOM	2031	OD2	ASP	440	89.024	2.831	22.929	1.00	37.33	A	O
ATOM	2032	C	ASP	440	87.994	6.476	24.392	1.00	35.04	A	C
ATOM	2033	O	ASP	440	86.959	6.575	23.744	1.00	35.99	A	O
ATOM	2034	N	TRP	441	88.025	6.505	25.721	1.00	36.12	A	N
ATOM	2035	CA	TRP	441	86.829	6.608	26.552	1.00	36.78	A	C



ATOM	2036	CB	TRP	441	87.240	6.505	28.015	1.00	41.15	A	C
ATOM	2037	CG	TRP	441	86.149	6.615	29.033	1.00	45.68	A	C
ATOM	2038	CD2	TRP	441	85.996	7.651	30.017	1.00	49.22	A	C
ATOM	2039	CE2	TRP	441	84.927	7.274	30.852	1.00	49.64	A	C
ATOM	2040	CE3	TRP	441	86.662	8.864	30.270	1.00	51.81	A	C
ATOM	2041	CD1	TRP	441	85.186	5.698	29.293	1.00	46.66	A	C
ATOM	2042	NE1	TRP	441	84.453	6.078	30.389	1.00	48.83	A	N
ATOM	2043	CZ2	TRP	441	84.501	8.062	31.927	1.00	52.14	A	C
ATOM	2044	CZ3	TRP	441	86.237	9.656	31.340	1.00	51.65	A	C
ATOM	2045	CH2	TRP	441	85.165	9.248	32.155	1.00	53.01	A	C
ATOM	2046	C	TRP	441	86.097	7.912	26.301	1.00	35.71	A	C
ATOM	2047	O	TRP	441	84.885	7.925	26.171	1.00	36.60	A	O
ATOM	2048	N	GLN	442	86.832	9.014	26.229	1.00	34.28	A	N
ATOM	2049	CA	GLN	442	86.209	10.308	25.984	1.00	32.84	A	C
ATOM	2050	CB	GLN	442	87.237	11.425	26.003	1.00	36.02	A	C
ATOM	2051	CG	GLN	442	87.728	11.810	27.366	1.00	39.49	A	C
ATOM	2052	CD	GLN	442	88.594	13.048	27.316	1.00	42.24	A	C
ATOM	2053	OE1	GLN	442	89.419	13.278	28.203	1.00	43.49	A	O
ATOM	2054	NE2	GLN	442	88.412	13.858	26.266	1.00	42.16	A	N
ATOM	2055	C	GLN	442	85.509	10.338	24.648	1.00	30.59	A	C
ATOM	2056	O	GLN	442	84.399	10.822	24.556	1.00	32.47	A	O
ATOM	2057	N	LYS	443	86.178	9.850	23.609	1.00	27.96	A	N
ATOM	2058	CA	LYS	443	85.623	9.822	22.258	1.00	25.71	A	C
ATOM	2059	CB	LYS	443	86.558	9.051	21.332	1.00	24.33	A	C
ATOM	2060	CG	LYS	443	86.155	9.056	19.868	1.00	24.32	A	C
ATOM	2061	CD	LYS	443	86.983	8.047	19.081	1.00	24.02	A	C
ATOM	2062	CE	LYS	443	86.651	6.629	19.514	1.00	21.71	A	C
ATOM	2063	NZ	LYS	443	87.711	5.689	19.117	1.00	20.86	A	N
ATOM	2064	C	LYS	443	84.211	9.211	22.226	1.00	25.29	A	C
ATOM	2065	O	LYS	443	83.326	9.715	21.527	1.00	25.21	A	O
ATOM	2066	N	TYR	444	84.011	8.135	22.987	1.00	24.08	A	N
ATOM	2067	CA	TYR	444	82.714	7.478	23.069	1.00	23.82	A	C
ATOM	2068	CB	TYR	444	82.865	6.047	23.580	1.00	22.60	A	C
ATOM	2069	CG	TYR	444	83.629	5.159	22.629	1.00	23.08	A	C
ATOM	2070	CD1	TYR	444	83.135	4.878	21.354	1.00	21.97	A	C
ATOM	2071	CE1	TYR	444	83.867	4.115	20.448	1.00	19.66	A	C
ATOM	2072	CD2	TYR	444	84.873	4.642	22.979	1.00	23.27	A	C
ATOM	2073	CE2	TYR	444	85.613	3.875	22.078	1.00	22.59	A	C
ATOM	2074	CZ	TYR	444	85.104	3.623	20.815	1.00	20.73	A	C
ATOM	2075	OH	TYR	444	85.865	2.915	19.923	1.00	20.21	A	O
ATOM	2076	C	TYR	444	81.797	8.286	23.980	1.00	24.60	A	C
ATOM	2077	O	TYR	444	80.581	8.292	23.806	1.00	25.16	A	O
ATOM	2078	N	GLU	445	82.388	8.984	24.945	1.00	25.67	A	N
ATOM	2079	CA	GLU	445	81.622	9.821	25.861	1.00	25.20	A	C
ATOM	2080	CB	GLU	445	82.475	10.263	27.050	1.00	25.33	A	C
ATOM	2081	CG	GLU	445	82.536	9.235	28.140	1.00	27.28	A	C
ATOM	2082	CD	GLU	445	81.158	8.787	28.564	1.00	29.57	A	C
ATOM	2083	OE1	GLU	445	80.811	7.611	28.325	1.00	29.15	A	O
ATOM	2084	OE2	GLU	445	80.411	9.618	29.122	1.00	32.22	A	O
ATOM	2085	C	GLU	445	81.086	11.033	25.120	1.00	24.99	A	C
ATOM	2086	O	GLU	445	79.959	11.454	25.341	1.00	25.67	A	O
ATOM	2087	N	THR	446	81.898	11.590	24.236	1.00	24.19	A	N
ATOM	2088	CA	THR	446	81.466	12.729	23.470	1.00	25.81	A	C
ATOM	2089	CB	THR	446	82.653	13.382	22.741	1.00	27.65	A	C
ATOM	2090	OG1	THR	446	83.650	13.758	23.700	1.00	28.07	A	O
ATOM	2091	CG2	THR	446	82.199	14.637	21.993	1.00	28.68	A	C
ATOM	2092	C	THR	446	80.407	12.227	22.484	1.00	26.19	A	C
ATOM	2093	O	THR	446	79.423	12.919	22.202	1.00	26.50	A	O
ATOM	2094	N	ALA	447	80.579	10.994	22.011	1.00	26.31	A	N
ATOM	2095	CA	ALA	447	79.617	10.404	21.082	1.00	26.13	A	C
ATOM	2096	CB	ALA	447	80.112	9.068	20.570	1.00	24.45	A	C
ATOM	2097	C	ALA	447	78.257	10.242	21.754	1.00	26.90	A	C
ATOM	2098	O	ALA	447	77.223	10.418	21.110	1.00	27.38	A	O

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ATOM	2099	N	ARG	448	78.262	9.930	23.050	1.00	26.88	A	N
ATOM	2100	CA	ARG	448	77.023	9.765	23.797	1.00	27.36	A	C
ATOM	2101	CB	ARG	448	77.272	9.026	25.106	1.00	26.65	A	C
ATOM	2102	CG	ARG	448	77.525	7.554	24.898	1.00	28.16	A	C
ATOM	2103	CD	ARG	448	77.905	6.845	26.185	1.00	30.36	A	C
ATOM	2104	NE	ARG	448	76.769	6.575	27.061	1.00	30.40	A	N
ATOM	2105	CZ	ARG	448	76.876	6.276	28.351	1.00	30.70	A	C
ATOM	2106	NH1	ARG	448	78.069	6.224	28.928	1.00	31.74	A	N
ATOM	2107	NH2	ARG	448	75.796	5.954	29.049	1.00	30.23	A	N
ATOM	2108	C	ARG	448	76.341	11.095	24.059	1.00	28.16	A	C
ATOM	2109	O	ARG	448	75.116	11.173	24.095	1.00	28.02	A	O
ATOM	2110	N	ARG	449	77.128	12.150	24.220	1.00	29.99	A	N
ATOM	2111	CA	ARG	449	76.551	13.462	24.462	1.00	32.39	A	C
ATOM	2112	CB	ARG	449	77.594	14.445	24.999	1.00	33.52	A	C
ATOM	2113	CG	ARG	449	78.109	14.074	26.396	1.00	37.94	A	C
ATOM	2114	CD	ARG	449	79.149	15.052	26.940	1.00	39.65	A	C
ATOM	2115	NE	ARG	449	80.240	15.260	25.995	1.00	42.67	A	N
ATOM	2116	CZ	ARG	449	80.465	16.408	25.363	1.00	44.20	A	C
ATOM	2117	NH1	ARG	449	79.681	17.462	25.587	1.00	43.57	A	N
ATOM	2118	NH2	ARG	449	81.440	16.484	24.464	1.00	44.43	A	N
ATOM	2119	C	ARG	449	75.910	13.974	23.189	1.00	33.07	A	C
ATOM	2120	O	ARG	449	75.169	14.944	23.222	1.00	33.89	A	O
ATOM	2121	N	LEU	450	76.214	13.330	22.065	1.00	34.07	A	N
ATOM	2122	CA	LEU	450	75.610	13.715	20.798	1.00	35.48	A	C
ATOM	2123	CB	LEU	450	76.520	13.401	19.605	1.00	34.17	A	C
ATOM	2124	CG	LEU	450	75.852	13.627	18.231	1.00	33.08	A	C
ATOM	2125	CD1	LEU	450	75.566	15.097	18.014	1.00	33.09	A	C
ATOM	2126	CD2	LEU	450	76.703	13.095	17.096	1.00	32.74	A	C
ATOM	2127	C	LEU	450	74.277	12.983	20.628	1.00	37.24	A	C
ATOM	2128	O	LEU	450	73.405	13.457	19.904	1.00	36.95	A	O
ATOM	2129	N	LYS	451	74.118	11.835	21.289	1.00	39.14	A	N
ATOM	2130	CA	LYS	451	72.879	11.069	21.184	1.00	41.22	A	C
ATOM	2131	CB	LYS	451	72.931	9.805	22.041	1.00	41.18	A	C
ATOM	2132	CG	LYS	451	71.711	8.911	21.888	1.00	40.59	A	C
ATOM	2133	CD	LYS	451	71.981	7.520	22.414	1.00	39.53	A	C
ATOM	2134	CE	LYS	451	70.699	6.741	22.580	1.00	39.30	A	C
ATOM	2135	NZ	LYS	451	69.833	7.386	23.598	1.00	39.15	A	N
ATOM	2136	C	LYS	451	71.750	11.986	21.620	1.00	43.32	A	C
ATOM	2137	O	LYS	451	70.633	11.914	21.112	1.00	44.17	A	O
ATOM	2138	N	LYS	452	72.068	12.857	22.567	1.00	45.65	A	N
ATOM	2139	CA	LYS	452	71.132	13.865	23.048	1.00	47.60	A	C
ATOM	2140	CB	LYS	452	71.461	14.222	24.501	1.00	48.31	A	C
ATOM	2141	CG	LYS	452	71.803	12.999	25.337	1.00	49.15	A	C
ATOM	2142	CD	LYS	452	72.160	13.334	26.770	1.00	50.18	A	C
ATOM	2143	CE	LYS	452	72.910	12.165	27.416	1.00	50.74	A	C
ATOM	2144	NZ	LYS	452	72.264	10.849	27.113	1.00	50.19	A	N
ATOM	2145	C	LYS	452	71.484	15.020	22.111	1.00	48.15	A	C
ATOM	2146	O	LYS	452	72.590	15.048	21.580	1.00	49.83	A	O
ATOM	2147	N	CYS	453	70.567	15.949	21.874	1.00	47.93	A	N
ATOM	2148	CA	CYS	453	70.840	17.066	20.962	1.00	48.55	A	C
ATOM	2149	CB	CYS	453	72.200	17.736	21.251	1.00	49.22	A	C
ATOM	2150	SG	CYS	453	72.586	18.087	22.970	1.00	51.56	A	S
ATOM	2151	C	CYS	453	70.846	16.628	19.494	1.00	47.75	A	C
ATOM	2152	O	CYS	453	70.833	17.470	18.603	1.00	48.58	A	O
ATOM	2153	N	VAL	454	70.910	15.326	19.231	1.00	47.01	A	N
ATOM	2154	CA	VAL	454	70.933	14.858	17.847	1.00	45.41	A	C
ATOM	2155	CB	VAL	454	71.259	13.333	17.732	1.00	44.78	A	C
ATOM	2156	CG1	VAL	454	70.065	12.477	18.117	1.00	43.45	A	C
ATOM	2157	CG2	VAL	454	71.752	12.996	16.332	1.00	42.70	A	C
ATOM	2158	C	VAL	454	69.626	15.193	17.142	1.00	45.12	A	C
ATOM	2159	O	VAL	454	69.642	15.677	16.017	1.00	44.90	A	O
ATOM	2160	N	ASP	455	68.502	14.985	17.823	1.00	45.26	A	N
ATOM	2161	CA	ASP	455	67.208	15.289	17.232	1.00	45.67	A	C

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ATOM	2162	CB	ASP	455	66.051	14.766	18.101	1.00	49.25	A	C
ATOM	2163	CG	ASP	455	65.904	13.233	18.048	1.00	52.53	A	C
ATOM	2164	OD1	ASP	455	66.306	12.614	17.034	1.00	54.18	A	O
ATOM	2165	OD2	ASP	455	65.374	12.644	19.020	1.00	53.11	A	O
ATOM	2166	C	ASP	455	67.111	16.792	17.045	1.00	44.22	A	C
ATOM	2167	O	ASP	455	66.623	17.261	16.016	1.00	43.58	A	O
ATOM	2168	N	LYS	456	67.635	17.538	18.017	1.00	42.90	A	N
ATOM	2169	CA	LYS	456	67.630	19.002	17.956	1.00	41.49	A	C
ATOM	2170	CB	LYS	456	68.064	19.604	19.297	1.00	41.42	A	C
ATOM	2171	CG	LYS	456	68.284	21.106	19.259	1.00	42.75	A	C
ATOM	2172	CD	LYS	456	68.656	21.649	20.625	1.00	45.05	A	C
ATOM	2173	CE	LYS	456	69.167	23.086	20.540	1.00	44.51	A	C
ATOM	2174	NZ	LYS	456	70.482	23.165	19.840	1.00	44.54	A	N
ATOM	2175	C	LYS	456	68.521	19.523	16.820	1.00	40.48	A	C
ATOM	2176	O	LYS	456	68.200	20.540	16.197	1.00	41.46	A	O
ATOM	2177	N	ILE	457	69.630	18.829	16.555	1.00	38.24	A	N
ATOM	2178	CA	ILE	457	70.541	19.210	15.481	1.00	36.22	A	C
ATOM	2179	CB	ILE	457	71.906	18.502	15.587	1.00	35.32	A	C
ATOM	2180	CG2	ILE	457	72.715	18.733	14.323	1.00	34.24	A	C
ATOM	2181	CG1	ILE	457	72.689	19.024	16.791	1.00	34.90	A	C
ATOM	2182	CD1	ILE	457	74.113	18.506	16.865	1.00	34.26	A	C
ATOM	2183	C	ILE	457	69.919	18.854	14.142	1.00	36.24	A	C
ATOM	2184	O	ILE	457	70.030	19.617	13.185	1.00	36.61	A	O
ATOM	2185	N	ARG	458	69.269	17.692	14.084	1.00	36.60	A	N
ATOM	2186	CA	ARG	458	68.604	17.227	12.868	1.00	36.39	A	C
ATOM	2187	CB	ARG	458	68.131	15.789	13.028	1.00	34.92	A	C
ATOM	2188	CG	ARG	458	69.252	14.784	12.907	1.00	33.89	A	C
ATOM	2189	CD	ARG	458	68.791	13.383	13.241	1.00	31.94	A	C
ATOM	2190	NE	ARG	458	69.847	12.409	12.997	1.00	30.26	A	N
ATOM	2191	CZ	ARG	458	69.926	11.229	13.598	1.00	32.42	A	C
ATOM	2192	NH1	ARG	458	69.004	10.866	14.482	1.00	32.37	A	N
ATOM	2193	NH2	ARG	458	70.934	10.410	13.320	1.00	34.51	A	N
ATOM	2194	C	ARG	458	67.438	18.115	12.470	1.00	37.19	A	C
ATOM	2195	O	ARG	458	67.166	18.299	11.289	1.00	36.92	A	O
ATOM	2196	N	ASN	459	66.747	18.671	13.454	1.00	38.92	A	N
ATOM	2197	CA	ASN	459	65.637	19.555	13.153	1.00	40.91	A	C
ATOM	2198	CB	ASN	459	64.752	19.759	14.385	1.00	40.48	A	C
ATOM	2199	CG	ASN	459	63.899	18.536	14.707	1.00	40.98	A	C
ATOM	2200	OD1	ASN	459	63.346	18.423	15.806	1.00	41.12	A	O
ATOM	2201	ND2	ASN	459	63.770	17.626	13.743	1.00	40.38	A	N
ATOM	2202	C	ASN	459	66.134	20.895	12.614	1.00	42.49	A	C
ATOM	2203	O	ASN	459	65.497	21.483	11.741	1.00	43.97	A	O
ATOM	2204	N	GLN	460	67.298	21.344	13.085	1.00	43.88	A	N
ATOM	2205	CA	GLN	460	67.846	22.624	12.643	1.00	45.37	A	C
ATOM	2206	CB	GLN	460	69.009	23.072	13.520	1.00	48.21	A	C
ATOM	2207	CG	GLN	460	69.401	24.522	13.279	1.00	51.96	A	C
ATOM	2208	CD	GLN	460	70.438	25.024	14.271	1.00	56.49	A	C
ATOM	2209	OE1	GLN	460	71.368	25.743	13.898	1.00	57.94	A	O
ATOM	2210	NE2	GLN	460	70.281	24.653	15.542	1.00	57.54	A	N
ATOM	2211	C	GLN	460	68.280	22.643	11.192	1.00	44.72	A	C
ATOM	2212	O	GLN	460	67.833	23.493	10.433	1.00	46.01	A	O
ATOM	2213	N	TYR	461	69.162	21.729	10.805	1.00	43.92	A	N
ATOM	2214	CA	TYR	461	69.613	21.706	9.425	1.00	43.30	A	C
ATOM	2215	CB	TYR	461	70.878	20.846	9.239	1.00	40.84	A	C
ATOM	2216	CG	TYR	461	70.731	19.345	9.390	1.00	37.87	A	C
ATOM	2217	CD1	TYR	461	70.024	18.591	8.455	1.00	38.00	A	C
ATOM	2218	CE1	TYR	461	69.950	17.194	8.549	1.00	38.75	A	C
ATOM	2219	CD2	TYR	461	71.361	18.671	10.427	1.00	37.61	A	C
ATOM	2220	CE2	TYR	461	71.299	17.277	10.534	1.00	39.05	A	C
ATOM	2221	CZ	TYR	461	70.592	16.541	9.592	1.00	39.16	A	C
ATOM	2222	OH	TYR	461	70.524	15.165	9.691	1.00	36.24	A	O
ATOM	2223	C	TYR	461	68.496	21.329	8.450	1.00	45.29	A	C
ATOM	2224	O	TYR	461	68.606	21.601	7.254	1.00	45.23	A	O

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ATOM	2225	N	ARG	462	67.419	20.722	8.957	1.00	47.19	A	N
ATOM	2226	CA	ARG	462	66.289	20.370	8.096	1.00	49.38	A	C
ATOM	2227	CB	ARG	462	65.325	19.383	8.770	1.00	50.31	A	C
ATOM	2228	CG	ARG	462	65.652	17.905	8.522	1.00	53.02	A	C
ATOM	2229	CD	ARG	462	64.408	17.002	8.566	1.00	55.16	A	C
ATOM	2230	NE	ARG	462	63.580	17.147	7.364	1.00	59.18	A	N
ATOM	2231	CZ	ARG	462	62.267	17.398	7.350	1.00	59.40	A	C
ATOM	2232	NH1	ARG	462	61.623	17.513	6.192	1.00	58.53	A	N
ATOM	2233	NH2	ARG	462	61.589	17.530	8.485	1.00	59.48	A	N
ATOM	2234	C	ARG	462	65.562	21.660	7.702	1.00	50.42	A	C
ATOM	2235	O	ARG	462	65.054	21.786	6.585	1.00	51.31	A	O
ATOM	2236	N	GLU	463	65.520	22.617	8.622	1.00	51.19	A	N
ATOM	2237	CA	GLU	463	64.900	23.903	8.344	1.00	52.29	A	C
ATOM	2238	CB	GLU	463	64.390	24.555	9.629	1.00	56.23	A	C
ATOM	2239	CG	GLU	463	63.020	24.054	10.076	1.00	62.08	A	C
ATOM	2240	CD	GLU	463	62.639	24.537	11.476	1.00	65.95	A	C
ATOM	2241	OE1	GLU	463	63.139	23.952	12.465	1.00	68.01	A	O
ATOM	2242	OE2	GLU	463	61.837	25.491	11.593	1.00	67.25	A	O
ATOM	2243	C	GLU	463	65.931	24.795	7.663	1.00	50.46	A	C
ATOM	2244	O	GLU	463	65.578	25.656	6.864	1.00	50.69	A	O
ATOM	2245	N	ASP	464	67.209	24.552	7.951	1.00	48.93	A	N
ATOM	2246	CA	ASP	464	68.308	25.324	7.368	1.00	47.43	A	C
ATOM	2247	CB	ASP	464	69.619	25.092	8.132	1.00	47.08	A	C
ATOM	2248	CG	ASP	464	69.744	25.969	9.377	1.00	48.33	A	C
ATOM	2249	OD1	ASP	464	69.092	27.037	9.440	1.00	49.66	A	O
ATOM	2250	OD2	ASP	464	70.507	25.598	10.295	1.00	47.93	A	O
ATOM	2251	C	ASP	464	68.523	25.093	5.875	1.00	46.17	A	C
ATOM	2252	O	ASP	464	69.426	25.675	5.281	1.00	45.05	A	O
ATOM	2253	N	TRP	465	67.711	24.224	5.278	1.00	45.79	A	N
ATOM	2254	CA	TRP	465	67.803	23.951	3.843	1.00	45.84	A	C
ATOM	2255	CB	TRP	465	67.175	22.600	3.487	1.00	42.59	A	C
ATOM	2256	CG	TRP	465	67.973	21.412	3.902	1.00	40.13	A	C
ATOM	2257	CD2	TRP	465	67.470	20.112	4.210	1.00	38.47	A	C
ATOM	2258	CE2	TRP	465	68.575	19.301	4.525	1.00	38.10	A	C
ATOM	2259	CE3	TRP	465	66.191	19.552	4.249	1.00	38.56	A	C
ATOM	2260	CD1	TRP	465	69.327	21.340	4.040	1.00	39.60	A	C
ATOM	2261	NE1	TRP	465	69.699	20.075	4.412	1.00	37.64	A	N
ATOM	2262	CZ2	TRP	465	68.440	17.957	4.875	1.00	38.33	A	C
ATOM	2263	CZ3	TRP	465	66.057	18.212	4.598	1.00	38.15	A	C
ATOM	2264	CH2	TRP	465	67.175	17.433	4.905	1.00	38.01	A	C
ATOM	2265	C	TRP	465	67.055	25.055	3.111	1.00	47.30	A	C
ATOM	2266	O	TRP	465	67.367	25.383	1.965	1.00	48.33	A	O
ATOM	2267	N	LYS	466	66.052	25.607	3.786	1.00	48.40	A	N
ATOM	2268	CA	LYS	466	65.236	26.682	3.241	1.00	50.02	A	C
ATOM	2269	CB	LYS	466	63.851	26.657	3.894	1.00	50.07	A	C
ATOM	2270	CG	LYS	466	63.199	25.296	3.949	1.00	51.75	A	C
ATOM	2271	CD	LYS	466	61.966	25.338	4.838	1.00	53.51	A	C
ATOM	2272	CE	LYS	466	61.241	23.994	4.883	1.00	55.00	A	C
ATOM	2273	NZ	LYS	466	60.582	23.617	3.594	1.00	54.94	A	N
ATOM	2274	C	LYS	466	65.900	28.044	3.513	1.00	50.89	A	C
ATOM	2275	O	LYS	466	65.368	29.091	3.129	1.00	51.49	A	O
ATOM	2276	N	SER	467	67.070	28.026	4.149	1.00	50.59	A	N
ATOM	2277	CA	SER	467	67.776	29.257	4.485	1.00	50.79	A	C
ATOM	2278	CB	SER	467	69.135	28.949	5.104	1.00	50.85	A	C
ATOM	2279	OG	SER	467	69.759	30.144	5.539	1.00	52.26	A	O
ATOM	2280	C	SER	467	67.941	30.250	3.336	1.00	50.61	A	C
ATOM	2281	O	SER	467	67.975	29.868	2.166	1.00	49.74	A	O
ATOM	2282	N	LYS	468	68.031	31.529	3.702	1.00	50.89	A	N
ATOM	2283	CA	LYS	468	68.187	32.643	2.763	1.00	50.39	A	C
ATOM	2284	CB	LYS	468	67.798	33.964	3.459	1.00	52.51	A	C
ATOM	2285	CG	LYS	468	66.296	34.122	3.789	1.00	54.15	A	C
ATOM	2286	CD	LYS	468	66.006	35.127	4.938	1.00	55.83	A	C
ATOM	2287	CE	LYS	468	66.613	36.527	4.715	1.00	57.74	A	C

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ATOM	2288	NZ	LYS	468	66.128	37.220	3.486	1.00	58.28	A	N
ATOM	2289	C	LYS	468	69.611	32.748	2.193	1.00	48.81	A	C
ATOM	2290	O	LYS	468	69.818	33.274	1.101	1.00	47.29	A	O
ATOM	2291	N	GLU	469	70.592	32.275	2.952	1.00	47.86	A	N
ATOM	2292	CA	GLU	469	71.982	32.317	2.516	1.00	47.60	A	C
ATOM	2293	CB	GLU	469	72.897	32.651	3.700	1.00	48.54	A	C
ATOM	2294	CG	GLU	469	72.848	34.117	4.147	1.00	50.92	A	C
ATOM	2295	CD	GLU	469	73.039	34.304	5.655	1.00	52.73	A	C
ATOM	2296	OE1	GLU	469	74.078	33.869	6.204	1.00	53.57	A	O
ATOM	2297	OE2	GLU	469	72.141	34.900	6.293	1.00	52.95	A	O
ATOM	2298	C	GLU	469	72.385	30.988	1.884	1.00	47.32	A	C
ATOM	2299	O	GLU	469	72.015	29.916	2.371	1.00	47.54	A	O
ATOM	2300	N	MET	470	73.112	31.068	0.773	1.00	46.55	A	N
ATOM	2301	CA	MET	470	73.588	29.891	0.052	1.00	45.66	A	C
ATOM	2302	CB	MET	470	74.257	30.329	-1.260	1.00	48.65	A	C
ATOM	2303	CG	MET	470	74.824	29.216	-2.147	1.00	51.46	A	C
ATOM	2304	SD	MET	470	73.601	28.039	-2.790	1.00	55.76	A	S
ATOM	2305	CE	MET	470	72.323	29.152	-3.465	1.00	55.46	A	C
ATOM	2306	C	MET	470	74.570	29.119	0.934	1.00	43.65	A	C
ATOM	2307	O	MET	470	74.456	27.906	1.081	1.00	44.34	A	O
ATOM	2308	N	LYS	471	75.511	29.833	1.544	1.00	41.15	A	N
ATOM	2309	CA	LYS	471	76.494	29.223	2.427	1.00	39.67	A	C
ATOM	2310	CB	LYS	471	77.284	30.291	3.198	1.00	42.56	A	C
ATOM	2311	CG	LYS	471	78.315	31.045	2.384	1.00	46.58	A	C
ATOM	2312	CD	LYS	471	79.647	31.110	3.138	1.00	50.65	A	C
ATOM	2313	CE	LYS	471	80.694	31.956	2.402	1.00	52.36	A	C
ATOM	2314	NZ	LYS	471	80.311	33.401	2.285	1.00	52.19	A	N
ATOM	2315	C	LYS	471	75.831	28.290	3.431	1.00	37.15	A	C
ATOM	2316	O	LYS	471	76.210	27.125	3.546	1.00	38.10	A	O
ATOM	2317	N	VAL	472	74.823	28.802	4.133	1.00	33.34	A	N
ATOM	2318	CA	VAL	472	74.112	28.030	5.146	1.00	30.48	A	C
ATOM	2319	CB	VAL	472	73.095	28.895	5.893	1.00	28.20	A	C
ATOM	2320	CG1	VAL	472	72.394	28.080	6.970	1.00	27.65	A	C
ATOM	2321	CG2	VAL	472	73.793	30.079	6.505	1.00	27.98	A	C
ATOM	2322	C	VAL	472	73.424	26.780	4.607	1.00	29.78	A	C
ATOM	2323	O	VAL	472	73.267	25.798	5.332	1.00	28.76	A	O
ATOM	2324	N	ARG	473	73.022	26.822	3.341	1.00	29.87	A	N
ATOM	2325	CA	ARG	473	72.367	25.685	2.704	1.00	30.56	A	C
ATOM	2326	CB	ARG	473	71.818	26.073	1.331	1.00	31.85	A	C
ATOM	2327	CG	ARG	473	70.504	26.804	1.310	1.00	33.16	A	C
ATOM	2328	CD	ARG	473	70.234	27.242	-0.120	1.00	34.00	A	C
ATOM	2329	NE	ARG	473	68.975	27.956	-0.276	1.00	34.66	A	N
ATOM	2330	CZ	ARG	473	67.808	27.369	-0.509	1.00	34.63	A	C
ATOM	2331	NH1	ARG	473	67.734	26.053	-0.612	1.00	33.02	A	N
ATOM	2332	NH2	ARG	473	66.712	28.101	-0.645	1.00	35.00	A	N
ATOM	2333	C	ARG	473	73.354	24.536	2.507	1.00	29.62	A	C
ATOM	2334	O	ARG	473	73.057	23.385	2.829	1.00	29.29	A	O
ATOM	2335	N	GLN	474	74.516	24.858	1.949	1.00	28.52	A	N
ATOM	2336	CA	GLN	474	75.536	23.859	1.681	1.00	28.70	A	C
ATOM	2337	CB	GLN	474	76.708	24.500	0.963	1.00	28.21	A	C
ATOM	2338	CG	GLN	474	76.322	25.163	-0.334	1.00	26.55	A	C
ATOM	2339	CD	GLN	474	77.523	25.631	-1.102	1.00	27.33	A	C
ATOM	2340	OE1	GLN	474	78.646	25.571	-0.606	1.00	27.89	A	O
ATOM	2341	NE2	GLN	474	77.303	26.088	-2.326	1.00	28.02	A	N
ATOM	2342	C	GLN	474	76.002	23.173	2.953	1.00	29.99	A	C
ATOM	2343	O	GLN	474	76.044	21.943	3.025	1.00	30.85	A	O
ATOM	2344	N	ARG	475	76.332	23.973	3.961	1.00	30.19	A	N
ATOM	2345	CA	ARG	475	76.764	23.445	5.242	1.00	29.96	A	C
ATOM	2346	CB	ARG	475	76.983	24.592	6.222	1.00	32.06	A	C
ATOM	2347	CG	ARG	475	77.633	24.177	7.523	1.00	36.07	A	C
ATOM	2348	CD	ARG	475	77.883	25.386	8.385	1.00	38.76	A	C
ATOM	2349	NE	ARG	475	76.631	26.018	8.778	1.00	41.20	A	N
ATOM	2350	CZ	ARG	475	76.508	27.303	9.083	1.00	43.14	A	C

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ATOM	2351	NH1	ARG	475	77.569	28.103	9.035	1.00	44.07	A	N
ATOM	2352	NH2	ARG	475	75.329	27.779	9.462	1.00	42.77	A	N
ATOM	2353	C	ARG	475	75.689	22.497	5.771	1.00	28.40	A	C
ATOM	2354	O	ARG	475	75.990	21.457	6.341	1.00	28.15	A	O
ATOM	2355	N	ALA	476	74.433	22.842	5.519	1.00	27.29	A	N
ATOM	2356	CA	ALA	476	73.300	22.038	5.951	1.00	26.13	A	C
ATOM	2357	CB	ALA	476	72.032	22.834	5.830	1.00	26.41	A	C
ATOM	2358	C	ALA	476	73.166	20.732	5.179	1.00	25.94	A	C
ATOM	2359	O	ALA	476	72.794	19.712	5.755	1.00	26.78	A	O
ATOM	2360	N	VAL	477	73.425	20.771	3.873	1.00	24.97	A	N
ATOM	2361	CA	VAL	477	73.335	19.578	3.036	1.00	22.82	A	C
ATOM	2362	CB	VAL	477	73.263	19.930	1.537	1.00	21.54	A	C
ATOM	2363	CG1	VAL	477	73.148	18.666	0.713	1.00	21.82	A	C
ATOM	2364	CG2	VAL	477	72.080	20.815	1.265	1.00	20.73	A	C
ATOM	2365	C	VAL	477	74.559	18.706	3.291	1.00	22.71	A	C
ATOM	2366	O	VAL	477	74.457	17.476	3.351	1.00	23.02	A	O
ATOM	2367	N	ALA	478	75.710	19.353	3.462	1.00	21.95	A	N
ATOM	2368	CA	ALA	478	76.969	18.655	3.732	1.00	21.61	A	C
ATOM	2369	CB	ALA	478	78.091	19.663	3.910	1.00	21.13	A	C
ATOM	2370	C	ALA	478	76.806	17.849	5.007	1.00	20.93	A	C
ATOM	2371	O	ALA	478	77.053	16.647	5.051	1.00	20.78	A	O
ATOM	2372	N	LEU	479	76.363	18.555	6.037	1.00	20.88	A	N
ATOM	2373	CA	LEU	479	76.111	17.999	7.347	1.00	20.64	A	C
ATOM	2374	CB	LEU	479	75.667	19.122	8.273	1.00	21.44	A	C
ATOM	2375	CG	LEU	479	75.286	18.915	9.728	1.00	22.87	A	C
ATOM	2376	CD1	LEU	479	76.244	17.966	10.431	1.00	23.17	A	C
ATOM	2377	CD2	LEU	479	75.287	20.304	10.368	1.00	24.12	A	C
ATOM	2378	C	LEU	479	75.049	16.929	7.234	1.00	20.81	A	C
ATOM	2379	O	LEU	479	75.081	15.962	7.979	1.00	23.18	A	O
ATOM	2380	N	TYR	480	74.132	17.088	6.279	1.00	20.85	A	N
ATOM	2381	CA	TYR	480	73.072	16.104	6.051	1.00	21.21	A	C
ATOM	2382	CB	TYR	480	72.101	16.589	4.973	1.00	20.06	A	C
ATOM	2383	CG	TYR	480	71.177	15.516	4.421	1.00	20.59	A	C
ATOM	2384	CD1	TYR	480	70.043	15.117	5.118	1.00	21.02	A	C
ATOM	2385	CE1	TYR	480	69.173	14.155	4.596	1.00	20.12	A	C
ATOM	2386	CD2	TYR	480	71.425	14.919	3.182	1.00	20.40	A	C
ATOM	2387	CE2	TYR	480	70.566	13.960	2.654	1.00	18.61	A	C
ATOM	2388	CZ	TYR	480	69.439	13.587	3.365	1.00	19.82	A	C
ATOM	2389	OH	TYR	480	68.552	12.681	2.830	1.00	19.01	A	O
ATOM	2390	C	TYR	480	73.697	14.784	5.607	1.00	21.92	A	C
ATOM	2391	O	TYR	480	73.386	13.718	6.152	1.00	21.15	A	O
ATOM	2392	N	PHE	481	74.574	14.865	4.611	1.00	22.24	A	N
ATOM	2393	CA	PHE	481	75.233	13.679	4.100	1.00	24.46	A	C
ATOM	2394	CB	PHE	481	75.940	13.973	2.779	1.00	25.42	A	C
ATOM	2395	CG	PHE	481	75.000	14.205	1.645	1.00	26.46	A	C
ATOM	2396	CD1	PHE	481	73.899	13.370	1.466	1.00	26.41	A	C
ATOM	2397	CD2	PHE	481	75.172	15.284	0.788	1.00	27.41	A	C
ATOM	2398	CE1	PHE	481	72.980	13.606	0.460	1.00	25.66	A	C
ATOM	2399	CE2	PHE	481	74.254	15.530	-0.228	1.00	28.41	A	C
ATOM	2400	CZ	PHE	481	73.152	14.686	-0.387	1.00	28.04	A	C
ATOM	2401	C	PHE	481	76.198	13.086	5.106	1.00	26.07	A	C
ATOM	2402	O	PHE	481	76.442	11.872	5.096	1.00	27.35	A	O
ATOM	2403	N	ILE	482	76.733	13.927	5.989	1.00	25.94	A	N
ATOM	2404	CA	ILE	482	77.654	13.432	6.995	1.00	27.42	A	C
ATOM	2405	CB	ILE	482	78.425	14.554	7.645	1.00	25.89	A	C
ATOM	2406	CG2	ILE	482	79.291	14.014	8.746	1.00	26.38	A	C
ATOM	2407	CG1	ILE	482	79.322	15.215	6.605	1.00	26.45	A	C
ATOM	2408	CD1	ILE	482	79.857	16.547	7.055	1.00	26.49	A	C
ATOM	2409	C	ILE	482	76.914	12.607	8.040	1.00	29.82	A	C
ATOM	2410	O	ILE	482	77.434	11.613	8.535	1.00	31.12	A	O
ATOM	2411	N	ASP	483	75.674	12.981	8.324	1.00	32.32	A	N
ATOM	2412	CA	ASP	483	74.864	12.249	9.287	1.00	35.00	A	C
ATOM	2413	CB	ASP	483	73.811	13.189	9.890	1.00	36.32	A	C

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ATOM	2414	CG	ASP	483	72.937	12.517	10.950	1.00	38.40	A	C
ATOM	2415	OD1	ASP	483	73.305	11.432	11.464	1.00	39.69	A	O
ATOM	2416	OD2	ASP	483	71.872	13.093	11.276	1.00	37.18	A	O
ATOM	2417	C	ASP	483	74.196	11.003	8.665	1.00	36.74	A	C
ATOM	2418	O	ASP	483	74.252	9.922	9.244	1.00	37.74	A	O
ATOM	2419	N	LYS	484	73.595	11.150	7.483	1.00	38.49	A	N
ATOM	2420	CA	LYS	484	72.894	10.048	6.802	1.00	39.82	A	C
ATOM	2421	CB	LYS	484	72.026	10.598	5.662	1.00	40.75	A	C
ATOM	2422	CG	LYS	484	70.984	9.629	5.106	1.00	40.83	A	C
ATOM	2423	CD	LYS	484	70.416	10.153	3.783	1.00	41.95	A	C
ATOM	2424	CE	LYS	484	69.008	9.611	3.474	1.00	42.20	A	C
ATOM	2425	NZ	LYS	484	68.944	8.145	3.187	1.00	42.60	A	N
ATOM	2426	C	LYS	484	73.803	8.957	6.244	1.00	40.25	A	C
ATOM	2427	O	LYS	484	73.710	7.798	6.642	1.00	40.36	A	O
ATOM	2428	N	LEU	485	74.649	9.340	5.291	1.00	40.58	A	N
ATOM	2429	CA	LEU	485	75.586	8.432	4.629	1.00	40.36	A	C
ATOM	2430	CB	LEU	485	75.957	9.003	3.264	1.00	40.54	A	C
ATOM	2431	CG	LEU	485	74.774	9.329	2.357	1.00	41.04	A	C
ATOM	2432	CD1	LEU	485	75.200	10.304	1.279	1.00	40.54	A	C
ATOM	2433	CD2	LEU	485	74.215	8.049	1.763	1.00	40.38	A	C
ATOM	2434	C	LEU	485	76.868	8.194	5.428	1.00	40.14	A	C
ATOM	2435	O	LEU	485	77.608	7.257	5.148	1.00	39.24	A	O
ATOM	2436	N	ALA	486	77.149	9.077	6.384	1.00	40.38	A	N
ATOM	2437	CA	ALA	486	78.339	8.975	7.229	1.00	39.53	A	C
ATOM	2438	CB	ALA	486	78.289	7.698	8.069	1.00	40.21	A	C
ATOM	2439	C	ALA	486	79.658	9.063	6.455	1.00	37.95	A	C
ATOM	2440	O	ALA	486	80.456	8.124	6.440	1.00	37.56	A	O
ATOM	2441	N	LEU	487	79.860	10.189	5.786	1.00	35.82	A	N
ATOM	2442	CA	LEU	487	81.079	10.416	5.028	1.00	35.00	A	C
ATOM	2443	CB	LEU	487	80.793	11.294	3.813	1.00	35.64	A	C
ATOM	2444	CG	LEU	487	79.672	10.924	2.853	1.00	35.44	A	C
ATOM	2445	CD1	LEU	487	79.662	11.954	1.738	1.00	36.70	A	C
ATOM	2446	CD2	LEU	487	79.880	9.527	2.294	1.00	35.87	A	C
ATOM	2447	C	LEU	487	82.057	11.154	5.934	1.00	34.08	A	C
ATOM	2448	O	LEU	487	81.655	11.721	6.953	1.00	35.36	A	O
ATOM	2449	N	ARG	488	83.332	11.172	5.558	1.00	31.73	A	N
ATOM	2450	CA	ARG	488	84.326	11.874	6.358	1.00	30.51	A	C
ATOM	2451	CB	ARG	488	85.727	11.355	6.053	1.00	31.03	A	C
ATOM	2452	CG	ARG	488	85.899	9.929	6.525	1.00	32.57	A	C
ATOM	2453	CD	ARG	488	87.216	9.311	6.126	1.00	32.30	A	C
ATOM	2454	NE	ARG	488	87.233	7.892	6.467	1.00	31.55	A	N
ATOM	2455	CZ	ARG	488	86.751	6.932	5.687	1.00	32.10	A	C
ATOM	2456	NH1	ARG	488	86.215	7.234	4.514	1.00	32.92	A	N
ATOM	2457	NH2	ARG	488	86.798	5.669	6.085	1.00	33.55	A	N
ATOM	2458	C	ARG	488	84.210	13.359	6.085	1.00	29.30	A	C
ATOM	2459	O	ARG	488	83.619	13.753	5.083	1.00	29.17	A	O
ATOM	2460	N	ALA	489	84.730	14.172	7.004	1.00	29.00	A	N
ATOM	2461	CA	ALA	489	84.682	15.634	6.897	1.00	27.99	A	C
ATOM	2462	CB	ALA	489	85.619	16.264	7.908	1.00	27.98	A	C
ATOM	2463	C	ALA	489	85.034	16.109	5.499	1.00	27.76	A	C
ATOM	2464	O	ALA	489	84.307	16.906	4.904	1.00	27.10	A	O
ATOM	2465	N	GLY	490	86.159	15.617	4.990	1.00	27.06	A	N
ATOM	2466	CA	GLY	490	86.598	15.977	3.657	1.00	27.80	A	C
ATOM	2467	C	GLY	490	87.614	17.097	3.590	1.00	28.62	A	C
ATOM	2468	O	GLY	490	87.378	18.103	2.913	1.00	29.18	A	O
ATOM	2469	N	ASN	491	88.741	16.936	4.283	1.00	28.40	A	N
ATOM	2470	CA	ASN	491	89.785	17.949	4.269	1.00	27.65	A	C
ATOM	2471	CB	ASN	491	90.853	17.643	5.308	1.00	20.98	A	C
ATOM	2472	CG	ASN	491	90.519	18.232	6.658	1.00	18.08	A	C
ATOM	2473	OD1	ASN	491	89.973	17.564	7.514	1.00	14.22	A	O
ATOM	2474	ND2	ASN	491	90.834	19.511	6.846	1.00	19.07	A	N
ATOM	2475	C	ASN	491	90.399	18.161	2.889	1.00	30.68	A	C
ATOM	2476	O	ASN	491	90.339	17.287	2.019	1.00	31.11	A	O

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ATOM	2477	N	GLU	492	90.922	19.364	2.682	1.00	34.70	A	N
ATOM	2478	CA	GLU	492	91.525	19.757	1.424	1.00	39.36	A	C
ATOM	2479	CB	GLU	492	91.245	21.239	1.153	1.00	42.98	A	C
ATOM	2480	CG	GLU	492	91.485	22.194	2.339	1.00	51.63	A	C
ATOM	2481	CD	GLU	492	90.461	22.067	3.475	1.00	54.73	A	C
ATOM	2482	OE1	GLU	492	89.252	22.282	3.226	1.00	56.53	A	O
ATOM	2483	OE2	GLU	492	90.875	21.772	4.623	1.00	55.94	A	O
ATOM	2484	C	GLU	492	93.016	19.442	1.383	1.00	40.96	A	C
ATOM	2485	O	GLU	492	93.774	19.817	2.281	1.00	42.58	A	O
ATOM	2486	N	LYS	493	93.423	18.745	0.330	1.00	42.02	A	N
ATOM	2487	CA	LYS	493	94.801	18.324	0.150	1.00	43.70	A	C
ATOM	2488	CB	LYS	493	94.813	16.821	-0.112	1.00	43.04	A	C
ATOM	2489	CG	LYS	493	93.598	16.101	0.459	1.00	41.95	A	C
ATOM	2490	CD	LYS	493	93.734	14.606	0.363	1.00	42.13	A	C
ATOM	2491	CE	LYS	493	93.924	14.161	-1.066	1.00	42.41	A	C
ATOM	2492	NZ	LYS	493	94.230	12.713	-1.118	1.00	41.52	A	N
ATOM	2493	C	LYS	493	95.455	19.058	-1.015	1.00	46.19	A	C
ATOM	2494	O	LYS	493	94.767	19.657	-1.832	1.00	47.08	A	O
ATOM	2495	N	GLU	494	96.783	19.031	-1.078	1.00	49.51	A	N
ATOM	2496	CA	GLU	494	97.510	19.685	-2.164	1.00	53.42	A	C
ATOM	2497	CB	GLU	494	98.874	20.172	-1.683	1.00	56.27	A	C
ATOM	2498	CG	GLU	494	98.813	21.266	-0.627	1.00	61.96	A	C
ATOM	2499	CD	GLU	494	100.190	21.721	-0.151	1.00	65.21	A	C
ATOM	2500	OE1	GLU	494	101.178	20.960	-0.304	1.00	66.31	A	O
ATOM	2501	OE2	GLU	494	100.278	22.847	0.387	1.00	66.25	A	O
ATOM	2502	C	GLU	494	97.698	18.718	-3.328	1.00	54.43	A	C
ATOM	2503	O	GLU	494	98.170	17.597	-3.139	1.00	54.99	A	O
ATOM	2504	N	GLU	495	97.341	19.152	-4.533	1.00	55.92	A	N
ATOM	2505	CA	GLU	495	97.473	18.298	-5.713	1.00	56.64	A	C
ATOM	2506	CB	GLU	495	96.782	18.924	-6.937	1.00	59.44	A	C
ATOM	2507	CG	GLU	495	97.422	20.216	-7.477	1.00	61.97	A	C
ATOM	2508	CD	GLU	495	96.849	20.643	-8.830	1.00	63.53	A	C
ATOM	2509	OE1	GLU	495	96.446	19.755	-9.614	1.00	64.40	A	O
ATOM	2510	OE2	GLU	495	96.805	21.864	-9.113	1.00	63.12	A	O
ATOM	2511	C	GLU	495	98.930	17.981	-6.035	1.00	55.03	A	C
ATOM	2512	O	GLU	495	99.795	18.857	-5.980	1.00	54.40	A	O
ATOM	2513	N	GLY	496	99.186	16.719	-6.374	1.00	53.62	A	N
ATOM	2514	CA	GLY	496	100.536	16.294	-6.702	1.00	50.68	A	C
ATOM	2515	C	GLY	496	101.327	15.830	-5.493	1.00	49.19	A	C
ATOM	2516	O	GLY	496	102.484	15.437	-5.623	1.00	49.09	A	O
ATOM	2517	N	GLU	497	100.716	15.909	-4.314	1.00	47.43	A	N
ATOM	2518	CA	GLU	497	101.359	15.481	-3.081	1.00	45.60	A	C
ATOM	2519	CB	GLU	497	101.187	16.534	-1.988	1.00	46.87	A	C
ATOM	2520	CG	GLU	497	102.057	17.779	-2.169	1.00	48.57	A	C
ATOM	2521	CD	GLU	497	103.534	17.531	-1.887	1.00	49.29	A	C
ATOM	2522	OE1	GLU	497	103.863	17.024	-0.791	1.00	49.33	A	O
ATOM	2523	OE2	GLU	497	104.366	17.861	-2.759	1.00	49.34	A	O
ATOM	2524	C	GLU	497	100.785	14.150	-2.626	1.00	43.87	A	C
ATOM	2525	O	GLU	497	101.461	13.368	-1.963	1.00	43.71	A	O
ATOM	2526	N	THR	498	99.532	13.900	-2.987	1.00	42.69	A	N
ATOM	2527	CA	THR	498	98.864	12.651	-2.637	1.00	42.16	A	C
ATOM	2528	CB	THR	498	98.071	12.776	-1.331	1.00	44.05	A	C
ATOM	2529	OG1	THR	498	98.825	13.553	-0.391	1.00	46.55	A	O
ATOM	2530	CG2	THR	498	97.807	11.392	-0.735	1.00	43.29	A	C
ATOM	2531	C	THR	498	97.886	12.302	-3.740	1.00	39.94	A	C
ATOM	2532	O	THR	498	97.523	13.162	-4.538	1.00	41.76	A	O
ATOM	2533	N	ALA	499	97.460	11.045	-3.785	1.00	37.09	A	N
ATOM	2534	CA	ALA	499	96.509	10.593	-4.793	1.00	35.17	A	C
ATOM	2535	CB	ALA	499	96.209	9.119	-4.607	1.00	35.23	A	C
ATOM	2536	C	ALA	499	95.227	11.398	-4.693	1.00	34.56	A	C
ATOM	2537	O	ALA	499	94.937	11.978	-3.659	1.00	34.44	A	O
ATOM	2538	N	ASP	500	94.467	11.448	-5.778	1.00	35.29	A	N
ATOM	2539	CA	ASP	500	93.214	12.187	-5.784	1.00	36.43	A	C



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ATOM	2540	CB	ASP	500	92.765	12.454	-7.223	1.00	40.10	A	C
ATOM	2541	CG	ASP	500	91.816	13.643	-7.332	1.00	43.79	A	C
ATOM	2542	OD1	ASP	500	91.247	14.054	-6.293	1.00	44.56	A	C
ATOM	2543	OD2	ASP	500	91.651	14.178	-8.455	1.00	44.54	A	O
ATOM	2544	C	ASP	500	92.122	11.422	-5.033	1.00	34.86	A	C
ATOM	2545	O	ASP	500	91.694	10.352	-5.470	1.00	35.19	A	O
ATOM	2546	N	THR	501	91.731	11.940	-3.872	1.00	32.70	A	N
ATOM	2547	CA	THR	501	90.682	11.325	-3.060	1.00	32.70	A	C
ATOM	2548	CB	THR	501	91.231	10.446	-1.893	1.00	34.47	A	C
ATOM	2549	OG1	THR	501	91.911	11.268	-0.938	1.00	36.78	A	O
ATOM	2550	CG2	THR	501	92.167	9.356	-2.405	1.00	33.62	A	C
ATOM	2551	C	THR	501	89.864	12.452	-2.457	1.00	30.90	A	C
ATOM	2552	O	THR	501	90.341	13.581	-2.386	1.00	31.92	A	O
ATOM	2553	N	VAL	502	88.644	12.153	-2.016	1.00	29.00	A	N
ATOM	2554	CA	VAL	502	87.784	13.183	-1.440	1.00	28.20	A	C
ATOM	2555	CB	VAL	502	86.835	13.811	-2.500	1.00	28.46	A	C
ATOM	2556	CG1	VAL	502	87.630	14.467	-3.616	1.00	27.35	A	C
ATOM	2557	CG2	VAL	502	85.864	12.761	-3.056	1.00	26.85	A	C
ATOM	2558	C	VAL	502	86.913	12.743	-0.272	1.00	28.06	A	C
ATOM	2559	O	VAL	502	86.765	11.553	0.021	1.00	27.74	A	O
ATOM	2560	N	GLY	503	86.349	13.738	0.398	1.00	27.25	A	N
ATOM	2561	CA	GLY	503	85.463	13.479	1.508	1.00	28.59	A	C
ATOM	2562	C	GLY	503	84.225	14.280	1.196	1.00	29.82	A	C
ATOM	2563	O	GLY	503	84.042	14.666	0.049	1.00	31.32	A	O
ATOM	2564	N	CYS	504	83.385	14.555	2.187	1.00	31.03	A	N
ATOM	2565	CA	CYS	504	82.180	15.342	1.939	1.00	32.70	A	C
ATOM	2566	CB	CYS	504	81.248	15.326	3.146	1.00	34.97	A	C
ATOM	2567	SG	CYS	504	79.895	16.509	2.975	1.00	42.52	A	S
ATOM	2568	C	CYS	504	82.453	16.791	1.522	1.00	31.78	A	C
ATOM	2569	O	CYS	504	82.191	17.154	0.384	1.00	32.54	A	O
ATOM	2570	N	CYS	505	83.004	17.602	2.426	1.00	31.33	A	N
ATOM	2571	CA	CYS	505	83.291	19.011	2.138	1.00	31.40	A	C
ATOM	2572	CB	CYS	505	83.922	19.697	3.349	1.00	31.19	A	C
ATOM	2573	SG	CYS	505	82.925	19.719	4.851	1.00	31.72	A	S
ATOM	2574	C	CYS	505	84.203	19.231	0.944	1.00	31.65	A	C
ATOM	2575	O	CYS	505	84.363	20.360	0.489	1.00	33.29	A	O
ATOM	2576	N	SER	506	84.750	18.143	0.413	1.00	31.90	A	N
ATOM	2577	CA	SER	506	85.686	18.198	-0.707	1.00	32.21	A	C
ATOM	2578	CB	SER	506	87.002	17.552	-0.267	1.00	33.28	A	C
ATOM	2579	OG	SER	506	88.069	17.924	-1.110	1.00	35.97	A	O
ATOM	2580	C	SER	506	85.201	17.557	-2.023	1.00	31.85	A	C
ATOM	2581	O	SER	506	85.995	17.362	-2.950	1.00	31.96	A	O
ATOM	2582	N	LEU	507	83.907	17.249	-2.116	1.00	30.34	A	N
ATOM	2583	CA	LEU	507	83.348	16.644	-3.329	1.00	28.42	A	C
ATOM	2584	CB	LEU	507	81.887	16.249	-3.104	1.00	23.84	A	C
ATOM	2585	CG	LEU	507	81.729	14.962	-2.299	1.00	23.13	A	C
ATOM	2586	CD1	LEU	507	80.306	14.728	-1.909	1.00	22.25	A	C
ATOM	2587	CD2	LEU	507	82.254	13.789	-3.101	1.00	23.70	A	C
ATOM	2588	C	LEU	507	83.461	17.557	-4.545	1.00	29.15	A	C
ATOM	2589	O	LEU	507	84.018	18.648	-4.470	1.00	30.57	A	O
ATOM	2590	N	ARG	508	82.986	17.080	-5.684	1.00	28.79	A	N
ATOM	2591	CA	ARG	508	83.018	17.872	-6.899	1.00	28.08	A	C
ATOM	2592	CB	ARG	508	84.311	17.646	-7.664	1.00	26.94	A	C
ATOM	2593	CG	ARG	508	85.566	18.130	-6.977	1.00	24.02	A	C
ATOM	2594	CD	ARG	508	86.717	18.112	-7.972	1.00	23.41	A	C
ATOM	2595	NE	ARG	508	87.902	17.468	-7.424	1.00	23.00	A	N
ATOM	2596	CZ	ARG	508	88.416	16.326	-7.864	1.00	21.18	A	C
ATOM	2597	NH1	ARG	508	87.857	15.676	-8.871	1.00	20.13	A	N
ATOM	2598	NH2	ARG	508	89.507	15.845	-7.298	1.00	21.42	A	N
ATOM	2599	C	ARG	508	81.830	17.491	-7.766	1.00	29.34	A	C
ATOM	2600	O	ARG	508	81.299	16.384	-7.667	1.00	29.87	A	O
ATOM	2601	N	VAL	509	81.435	18.392	-8.650	1.00	28.90	A	N
ATOM	2602	CA	VAL	509	80.290	18.137	-9.494	1.00	29.91	A	C

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ATOM	2603	CB	VAL	509	80.020	19.345	-10.405	1.00	30.27	A	C
ATOM	2604	CG1	VAL	509	78.840	19.089	-11.319	1.00	31.31	A	C
ATOM	2605	CG2	VAL	509	79.730	20.559	-9.546	1.00	31.03	A	C
ATOM	2606	C	VAL	509	80.370	16.830	-10.277	1.00	30.89	A	C
ATOM	2607	O	VAL	509	79.351	16.319	-10.738	1.00	32.98	A	O
ATOM	2608	N	GLU	510	81.555	16.241	-10.371	1.00	31.37	A	N
ATOM	2609	CA	GLU	510	81.687	14.988	-11.109	1.00	31.22	A	C
ATOM	2610	CB	GLU	510	83.047	14.898	-11.809	1.00	33.27	A	C
ATOM	2611	CG	GLU	510	84.271	15.143	-10.940	1.00	35.61	A	C
ATOM	2612	CD	GLU	510	85.496	15.494	-11.780	1.00	38.27	A	C
ATOM	2613	OE1	GLU	510	85.417	16.453	-12.571	1.00	41.24	A	O
ATOM	2614	OE2	GLU	510	86.539	14.820	-11.668	1.00	39.15	A	O
ATOM	2615	C	GLU	510	81.413	13.739	-10.285	1.00	30.41	A	C
ATOM	2616	O	GLU	510	81.126	12.675	-10.832	1.00	29.25	A	O
ATOM	2617	N	HIS	511	81.452	13.880	-8.967	1.00	30.49	A	N
ATOM	2618	CA	HIS	511	81.214	12.751	-8.077	1.00	29.70	A	C
ATOM	2619	CB	HIS	511	81.923	12.945	-6.733	1.00	28.21	A	C
ATOM	2620	CG	HIS	511	83.387	13.227	-6.867	1.00	27.63	A	C
ATOM	2621	CD2	HIS	511	84.369	12.546	-7.503	1.00	26.09	A	C
ATOM	2622	ND1	HIS	511	83.978	14.360	-6.349	1.00	27.51	A	N
ATOM	2623	CE1	HIS	511	85.262	14.366	-6.664	1.00	27.41	A	C
ATOM	2624	NE2	HIS	511	85.525	13.276	-7.364	1.00	25.67	A	N
ATOM	2625	C	HIS	511	79.744	12.475	-7.873	1.00	29.62	A	C
ATOM	2626	O	HIS	511	79.396	11.424	-7.353	1.00	31.80	A	O
ATOM	2627	N	ILE	512	78.880	13.412	-8.255	1.00	29.84	A	N
ATOM	2628	CA	ILE	512	77.441	13.184	-8.121	1.00	31.47	A	C
ATOM	2629	CB	ILE	512	76.779	13.997	-6.983	1.00	31.47	A	C
ATOM	2630	CG2	ILE	512	77.314	13.553	-5.634	1.00	32.39	A	C
ATOM	2631	CG1	ILE	512	76.972	15.497	-7.198	1.00	33.11	A	C
ATOM	2632	CD1	ILE	512	76.201	16.340	-6.217	1.00	32.82	A	C
ATOM	2633	C	ILE	512	76.644	13.396	-9.399	1.00	32.65	A	C
ATOM	2634	O	ILE	512	76.925	14.287	-10.200	1.00	33.40	A	O
ATOM	2635	N	ASN	513	75.654	12.532	-9.580	1.00	34.96	A	N
ATOM	2636	CA	ASN	513	74.764	12.563	-10.726	1.00	36.74	A	C
ATOM	2637	CB	ASN	513	75.018	11.360	-11.626	1.00	37.11	A	C
ATOM	2638	CG	ASN	513	76.467	11.241	-12.016	1.00	39.60	A	C
ATOM	2639	OD1	ASN	513	76.986	12.063	-12.780	1.00	38.91	A	O
ATOM	2640	ND2	ASN	513	77.151	10.249	-11.450	1.00	39.10	A	N
ATOM	2641	C	ASN	513	73.371	12.481	-10.147	1.00	38.71	A	C
ATOM	2642	O	ASN	513	73.063	11.569	-9.368	1.00	38.58	A	O
ATOM	2643	N	LEU	514	72.544	13.462	-10.489	1.00	40.30	A	N
ATOM	2644	CA	LEU	514	71.181	13.505	-9.991	1.00	40.60	A	C
ATOM	2645	CB	LEU	514	70.762	14.947	-9.770	1.00	39.25	A	C
ATOM	2646	CG	LEU	514	71.778	15.759	-8.983	1.00	37.11	A	C
ATOM	2647	CD1	LEU	514	71.142	17.075	-8.591	1.00	37.77	A	C
ATOM	2648	CD2	LEU	514	72.204	14.996	-7.750	1.00	37.14	A	C
ATOM	2649	C	LEU	514	70.200	12.805	-10.914	1.00	41.82	A	C
ATOM	2650	O	LEU	514	70.292	12.902	-12.142	1.00	41.95	A	O
ATOM	2651	N	HIS	515	69.263	12.093	-10.306	1.00	43.13	A	N
ATOM	2652	CA	HIS	515	68.250	11.367	-11.048	1.00	45.24	A	C
ATOM	2653	CB	HIS	515	68.546	9.867	-11.044	1.00	44.32	A	C
ATOM	2654	CG	HIS	515	69.785	9.483	-11.789	1.00	42.96	A	C
ATOM	2655	CD2	HIS	515	70.245	9.852	-13.006	1.00	42.64	A	C
ATOM	2656	ND1	HIS	515	70.696	8.576	-11.295	1.00	42.91	A	N
ATOM	2657	CE1	HIS	515	71.663	8.400	-12.176	1.00	42.09	A	C
ATOM	2658	NE2	HIS	515	71.413	9.164	-13.223	1.00	42.11	A	N
ATOM	2659	C	HIS	515	66.894	11.587	-10.408	1.00	48.30	A	C
ATOM	2660	O	HIS	515	66.681	11.200	-9.256	1.00	47.05	A	O
ATOM	2661	N	PRO	516	65.972	12.263	-11.123	1.00	52.37	A	N
ATOM	2662	CD	PRO	516	66.187	12.993	-12.387	1.00	52.58	A	C
ATOM	2663	CA	PRO	516	64.624	12.523	-10.605	1.00	54.50	A	C
ATOM	2664	CB	PRO	516	63.997	13.368	-11.715	1.00	53.23	A	C
ATOM	2665	CG	PRO	516	65.175	14.101	-12.284	1.00	51.26	A	C

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ATOM	2666	C	PRO	516	63.890	11.189	-10.432	1.00	57.22	A	C
ATOM	2667	O	PRO	516	63.187	10.978	-9.444	1.00	55.92	A	O
ATOM	2668	N	GLU	517	64.119	10.276	-11.377	1.00	61.15	A	N
ATOM	2669	CA	GLU	517	63.499	8.956	-11.349	1.00	65.93	A	C
ATOM	2670	CB	GLU	517	62.935	8.614	-12.735	1.00	67.57	A	C
ATOM	2671	CG	GLU	517	61.912	7.472	-12.753	1.00	68.82	A	C
ATOM	2672	CD	GLU	517	61.156	7.396	-14.071	1.00	69.47	A	C
ATOM	2673	OE1	GLU	517	59.926	7.630	-14.074	1.00	69.08	A	O
ATOM	2674	OE2	GLU	517	61.794	7.116	-15.107	1.00	69.87	A	O
ATOM	2675	C	GLU	517	64.480	7.879	-10.870	1.00	68.08	A	C
ATOM	2676	O	GLU	517	64.877	7.878	-9.708	1.00	68.78	A	O
ATOM	2677	N	LEU	518	64.857	6.966	-11.764	1.00	70.70	A	N
ATOM	2678	CA	LEU	518	65.781	5.872	-11.452	1.00	73.55	A	C
ATOM	2679	CB	LEU	518	67.142	6.413	-10.990	1.00	73.03	A	C
ATOM	2680	CG	LEU	518	68.212	5.352	-10.704	1.00	72.26	A	C
ATOM	2681	CD1	LEU	518	68.656	4.695	-11.998	1.00	72.27	A	C
ATOM	2682	CD2	LEU	518	69.394	5.980	-10.011	1.00	72.52	A	C
ATOM	2683	C	LEU	518	65.260	4.833	-10.444	1.00	75.63	A	C
ATOM	2684	O	LEU	518	65.358	5.019	-9.225	1.00	75.27	A	O
ATOM	2685	N	ASP	519	64.724	3.736	-10.979	1.00	77.90	A	N
ATOM	2686	CA	ASP	519	64.199	2.611	-10.195	1.00	79.94	A	C
ATOM	2687	CB	ASP	519	65.343	1.807	-9.568	1.00	81.45	A	C
ATOM	2688	CG	ASP	519	66.014	0.879	-10.560	1.00	83.33	A	C
ATOM	2689	OD1	ASP	519	65.635	-0.315	-10.610	1.00	83.96	A	O
ATOM	2690	OD2	ASP	519	66.915	1.345	-11.292	1.00	84.76	A	O
ATOM	2691	C	ASP	519	63.116	2.872	-9.147	1.00	80.09	A	C
ATOM	2692	O	ASP	519	63.311	2.601	-7.956	1.00	79.95	A	O
ATOM	2693	N	GLY	520	61.966	3.357	-9.608	1.00	80.02	A	N
ATOM	2694	CA	GLY	520	60.842	3.617	-8.724	1.00	79.51	A	C
ATOM	2695	C	GLY	520	61.021	4.736	-7.719	1.00	78.87	A	C
ATOM	2696	O	GLY	520	60.159	5.612	-7.607	1.00	79.41	A	O
ATOM	2697	N	GLN	521	62.118	4.690	-6.966	1.00	77.57	A	N
ATOM	2698	CA	GLN	521	62.408	5.708	-5.960	1.00	75.73	A	C
ATOM	2699	CB	GLN	521	63.552	5.250	-5.054	1.00	75.86	A	C
ATOM	2700	CG	GLN	521	63.259	3.941	-4.336	1.00	75.55	A	C
ATOM	2701	CD	GLN	521	64.326	3.568	-3.332	1.00	75.40	A	C
ATOM	2702	OE1	GLN	521	65.461	3.252	-3.697	1.00	74.71	A	O
ATOM	2703	NE2	GLN	521	63.965	3.599	-2.054	1.00	75.22	A	N
ATOM	2704	C	GLN	521	62.739	7.039	-6.628	1.00	73.82	A	C
ATOM	2705	O	GLN	521	63.526	7.091	-7.575	1.00	73.19	A	O
ATOM	2706	N	GLU	522	62.091	8.101	-6.157	1.00	71.42	A	N
ATOM	2707	CA	GLU	522	62.293	9.432	-6.712	1.00	69.27	A	C
ATOM	2708	CB	GLU	522	60.960	10.188	-6.816	1.00	72.46	A	C
ATOM	2709	CG	GLU	522	60.095	10.153	-5.554	1.00	76.49	A	C
ATOM	2710	CD	GLU	522	59.003	9.085	-5.597	1.00	78.78	A	C
ATOM	2711	OE1	GLU	522	57.971	9.269	-4.911	1.00	79.66	A	O
ATOM	2712	OE2	GLU	522	59.167	8.069	-6.314	1.00	79.50	A	O
ATOM	2713	C	GLU	522	63.312	10.262	-5.948	1.00	65.69	A	C
ATOM	2714	O	GLU	522	63.472	10.116	-4.733	1.00	65.20	A	O
ATOM	2715	N	TYR	523	63.985	11.145	-6.682	1.00	61.53	A	N
ATOM	2716	CA	TYR	523	65.011	12.027	-6.133	1.00	56.80	A	C
ATOM	2717	CB	TYR	523	64.426	12.912	-5.030	1.00	58.62	A	C
ATOM	2718	CG	TYR	523	63.281	13.771	-5.500	1.00	60.85	A	C
ATOM	2719	CD1	TYR	523	62.007	13.636	-4.948	1.00	61.98	A	C
ATOM	2720	CE1	TYR	523	60.939	14.404	-5.405	1.00	63.47	A	C
ATOM	2721	CD2	TYR	523	63.463	14.698	-6.521	1.00	62.38	A	C
ATOM	2722	CE2	TYR	523	62.406	15.471	-6.988	1.00	64.16	A	C
ATOM	2723	CZ	TYR	523	61.145	15.321	-6.429	1.00	64.58	A	C
ATOM	2724	OH	TYR	523	60.099	16.087	-6.903	1.00	65.12	A	O
ATOM	2725	C	TYR	523	66.182	11.209	-5.606	1.00	52.41	A	C
ATOM	2726	O	TYR	523	66.406	11.133	-4.399	1.00	53.12	A	O
ATOM	2727	N	VAL	524	66.914	10.586	-6.526	1.00	46.17	A	N
ATOM	2728	CA	VAL	524	68.063	9.752	-6.185	1.00	40.09	A	C

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ATOM	2729	CB	VAL	524	67.965	8.384	-6.908	1.00	38.04	A	C
ATOM	2730	CG1	VAL	524	69.267	7.642	-6.840	1.00	36.51	A	C
ATOM	2731	CG2	VAL	524	66.880	7.547	-6.273	1.00	37.27	A	C
ATOM	2732	C	VAL	524	69.386	10.434	-6.518	1.00	37.60	A	C
ATOM	2733	O	VAL	524	69.546	11.000	-7.597	1.00	39.01	A	O
ATOM	2734	N	VAL	525	70.318	10.420	-5.569	1.00	34.95	A	N
ATOM	2735	CA	VAL	525	71.641	11.022	-5.759	1.00	31.15	A	C
ATOM	2736	CB	VAL	525	72.071	11.852	-4.535	1.00	28.69	A	C
ATOM	2737	CG1	VAL	525	73.485	12.321	-4.701	1.00	29.50	A	C
ATOM	2738	CG2	VAL	525	71.163	13.043	-4.359	1.00	27.52	A	C
ATOM	2739	C	VAL	525	72.626	9.891	-5.944	1.00	30.65	A	C
ATOM	2740	O	VAL	525	72.891	9.133	-5.016	1.00	31.22	A	O
ATOM	2741	N	GLU	526	73.144	9.748	-7.151	1.00	31.06	A	N
ATOM	2742	CA	GLU	526	74.091	8.676	-7.433	1.00	32.58	A	C
ATOM	2743	CB	GLU	526	73.925	8.219	-8.887	1.00	36.13	A	C
ATOM	2744	CG	GLU	526	74.840	7.091	-9.344	1.00	40.33	A	C
ATOM	2745	CD	GLU	526	74.832	6.922	-10.864	1.00	43.19	A	C
ATOM	2746	OE1	GLU	526	74.653	5.777	-11.340	1.00	43.68	A	O
ATOM	2747	OE2	GLU	526	74.999	7.940	-11.581	1.00	44.50	A	O
ATOM	2748	C	GLU	526	75.539	9.102	-7.143	1.00	31.39	A	C
ATOM	2749	O	GLU	526	76.181	9.802	-7.936	1.00	30.81	A	O
ATOM	2750	N	PHE	527	76.033	8.704	-5.978	1.00	29.90	A	N
ATOM	2751	CA	PHE	527	77.399	9.017	-5.572	1.00	28.09	A	C
ATOM	2752	CB	PHE	527	77.526	8.940	-4.056	1.00	26.80	A	C
ATOM	2753	CG	PHE	527	76.893	10.079	-3.331	1.00	24.02	A	C
ATOM	2754	CD1	PHE	527	75.616	9.949	-2.796	1.00	21.01	A	C
ATOM	2755	CD2	PHE	527	77.594	11.262	-3.133	1.00	20.36	A	C
ATOM	2756	CE1	PHE	527	75.051	10.977	-2.072	1.00	18.65	A	C
ATOM	2757	CE2	PHE	527	77.039	12.288	-2.415	1.00	19.92	A	C
ATOM	2758	CZ	PHE	527	75.760	12.147	-1.879	1.00	20.52	A	C
ATOM	2759	C	PHE	527	78.411	8.040	-6.158	1.00	27.39	A	C
ATOM	2760	O	PHE	527	78.220	6.818	-6.094	1.00	27.66	A	O
ATOM	2761	N	ASP	528	79.483	8.575	-6.728	1.00	25.84	A	N
ATOM	2762	CA	ASP	528	80.536	7.734	-7.268	1.00	27.04	A	C
ATOM	2763	CB	ASP	528	80.213	7.214	-8.674	1.00	28.99	A	C
ATOM	2764	CG	ASP	528	81.096	6.018	-9.070	1.00	30.72	A	C
ATOM	2765	OD1	ASP	528	81.689	5.394	-8.162	1.00	31.30	A	O
ATOM	2766	OD2	ASP	528	81.197	5.692	-10.275	1.00	30.53	A	O
ATOM	2767	C	ASP	528	81.851	8.492	-7.264	1.00	26.91	A	C
ATOM	2768	O	ASP	528	82.141	9.263	-8.180	1.00	28.86	A	O
ATOM	2769	N	PHE	529	82.653	8.228	-6.236	1.00	25.34	A	N
ATOM	2770	CA	PHE	529	83.936	8.883	-6.058	1.00	22.71	A	C
ATOM	2771	CB	PHE	529	83.719	10.173	-5.280	1.00	24.00	A	C
ATOM	2772	CG	PHE	529	83.198	9.968	-3.870	1.00	24.56	A	C
ATOM	2773	CD1	PHE	529	84.070	9.700	-2.819	1.00	24.04	A	C
ATOM	2774	CD2	PHE	529	81.847	10.127	-3.583	1.00	23.90	A	C
ATOM	2775	CE1	PHE	529	83.607	9.605	-1.515	1.00	22.96	A	C
ATOM	2776	CE2	PHE	529	81.377	10.032	-2.274	1.00	22.39	A	C
ATOM	2777	CZ	PHE	529	82.258	9.773	-1.243	1.00	22.95	A	C
ATOM	2778	C	PHE	529	84.929	8.019	-5.295	1.00	21.46	A	C
ATOM	2779	O	PHE	529	84.610	6.904	-4.878	1.00	22.30	A	O
ATOM	2780	N	LEU	530	86.125	8.562	-5.081	1.00	19.25	A	N
ATOM	2781	CA	LEU	530	87.168	7.867	-4.338	1.00	16.97	A	C
ATOM	2782	CB	LEU	530	88.450	7.842	-5.149	1.00	14.44	A	C
ATOM	2783	CG	LEU	530	88.388	6.987	-6.408	1.00	14.73	A	C
ATOM	2784	CD1	LEU	530	89.771	6.881	-7.020	1.00	14.24	A	C
ATOM	2785	CD2	LEU	530	87.881	5.614	-6.060	1.00	12.51	A	C
ATOM	2786	C	LEU	530	87.410	8.497	-2.958	1.00	17.39	A	C
ATOM	2787	O	LEU	530	87.675	9.689	-2.845	1.00	17.03	A	O
ATOM	2788	N	GLY	531	87.288	7.692	-1.908	1.00	19.09	A	N
ATOM	2789	CA	GLY	531	87.489	8.190	-0.557	1.00	21.94	A	C
ATOM	2790	C	GLY	531	88.871	7.910	0.022	1.00	24.36	A	C
ATOM	2791	O	GLY	531	89.863	7.775	-0.711	1.00	24.02	A	O

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ATOM	2792	N	LYS	532	88.947	7.829	1.348	1.00	25.11	A	N
ATOM	2793	CA	LYS	532	90.218	7.569	2.002	1.00	26.73	A	C
ATOM	2794	CB	LYS	532	90.041	7.504	3.516	1.00	25.25	A	C
ATOM	2795	CG	LYS	532	91.352	7.391	4.276	1.00	23.41	A	C
ATOM	2796	CD	LYS	532	91.124	7.349	5.777	1.00	22.38	A	C
ATOM	2797	CE	LYS	532	92.427	7.131	6.531	1.00	22.85	A	C
ATOM	2798	NZ	LYS	532	92.211	7.240	8.004	1.00	23.55	A	N
ATOM	2799	C	LYS	532	90.772	6.253	1.485	1.00	28.73	A	C
ATOM	2800	O	LYS	532	90.009	5.390	1.050	1.00	29.23	A	O
ATOM	2801	N	ASP	533	92.101	6.139	1.467	1.00	30.66	A	N
ATOM	2802	CA	ASP	533	92.807	4.933	1.014	1.00	31.90	A	C
ATOM	2803	CB	ASP	533	92.544	3.743	1.962	1.00	33.40	A	C
ATOM	2804	CG	ASP	533	93.037	3.991	3.401	1.00	37.26	A	C
ATOM	2805	OD1	ASP	533	94.177	4.487	3.587	1.00	37.29	A	O
ATOM	2806	OD2	ASP	533	92.281	3.681	4.354	1.00	38.54	A	O
ATOM	2807	C	ASP	533	92.485	4.526	-0.422	1.00	31.46	A	C
ATOM	2808	O	ASP	533	92.813	3.415	-0.846	1.00	32.71	A	O
ATOM	2809	N	SER	534	91.841	5.427	-1.159	1.00	30.74	A	N
ATOM	2810	CA	SER	534	91.465	5.183	-2.548	1.00	30.05	A	C
ATOM	2811	CB	SER	534	92.702	4.890	-3.402	1.00	30.61	A	C
ATOM	2812	OG	SER	534	93.097	6.026	-4.151	1.00	32.86	A	O
ATOM	2813	C	SER	534	90.442	4.072	-2.728	1.00	29.71	A	C
ATOM	2814	O	SER	534	90.511	3.319	-3.702	1.00	30.54	A	O
ATOM	2815	N	ILE	535	89.524	3.950	-1.770	1.00	28.76	A	N
ATOM	2816	CA	ILE	535	88.460	2.947	-1.827	1.00	28.09	A	C
ATOM	2817	CB	ILE	535	88.208	2.291	-0.444	1.00	26.99	A	C
ATOM	2818	CG2	ILE	535	86.821	1.651	-0.385	1.00	25.52	A	C
ATOM	2819	CG1	ILE	535	89.289	1.246	-0.168	1.00	27.83	A	C
ATOM	2820	CD1	ILE	535	89.073	0.435	1.105	1.00	27.75	A	C
ATOM	2821	C	ILE	535	87.172	3.577	-2.375	1.00	29.65	A	C
ATOM	2822	O	ILE	535	86.544	4.445	-1.744	1.00	28.74	A	O
ATOM	2823	N	ARG	536	86.803	3.127	-3.569	1.00	30.37	A	N
ATOM	2824	CA	ARG	536	85.626	3.603	-4.275	1.00	30.99	A	C
ATOM	2825	CB	ARG	536	85.393	2.718	-5.495	1.00	32.15	A	C
ATOM	2826	CG	ARG	536	84.152	3.053	-6.291	1.00	35.61	A	C
ATOM	2827	CD	ARG	536	84.051	2.157	-7.500	1.00	38.57	A	C
ATOM	2828	NE	ARG	536	83.547	2.881	-8.661	1.00	42.59	A	N
ATOM	2829	CZ	ARG	536	83.080	2.303	-9.765	1.00	45.00	A	C
ATOM	2830	NH1	ARG	536	83.056	0.979	-9.865	1.00	46.21	A	N
ATOM	2831	NH2	ARG	536	82.610	3.051	-10.761	1.00	45.32	A	N
ATOM	2832	C	ARG	536	84.362	3.616	-3.437	1.00	31.20	A	C
ATOM	2833	O	ARG	536	84.022	2.622	-2.808	1.00	31.31	A	O
ATOM	2834	N	TYR	537	83.692	4.760	-3.395	1.00	31.58	A	N
ATOM	2835	CA	TYR	537	82.432	4.855	-2.676	1.00	32.81	A	C
ATOM	2836	CB	TYR	537	82.413	6.030	-1.707	1.00	32.04	A	C
ATOM	2837	CG	TYR	537	81.095	6.155	-0.979	1.00	31.19	A	C
ATOM	2838	CD1	TYR	537	80.146	7.096	-1.366	1.00	30.79	A	C
ATOM	2839	CE1	TYR	537	78.913	7.182	-0.725	1.00	31.37	A	C
ATOM	2840	CD2	TYR	537	80.781	5.300	0.074	1.00	31.93	A	C
ATOM	2841	CE2	TYR	537	79.552	5.374	0.725	1.00	31.62	A	C
ATOM	2842	CZ	TYR	537	78.621	6.317	0.321	1.00	31.85	A	C
ATOM	2843	OH	TYR	537	77.406	6.400	0.966	1.00	30.32	A	O
ATOM	2844	C	TYR	537	81.351	5.064	-3.723	1.00	34.84	A	C
ATOM	2845	O	TYR	537	81.314	6.106	-4.376	1.00	37.04	A	O
ATOM	2846	N	TYR	538	80.488	4.071	-3.898	1.00	35.70	A	N
ATOM	2847	CA	TYR	538	79.409	4.164	-4.872	1.00	36.63	A	C
ATOM	2848	CB	TYR	538	79.624	3.157	-5.998	1.00	38.46	A	C
ATOM	2849	CG	TYR	538	78.515	3.154	-7.020	1.00	41.50	A	C
ATOM	2850	CD1	TYR	538	78.590	3.954	-8.157	1.00	43.03	A	C
ATOM	2851	CE1	TYR	538	77.560	3.980	-9.092	1.00	44.13	A	C
ATOM	2852	CD2	TYR	538	77.376	2.372	-6.839	1.00	42.86	A	C
ATOM	2853	CE2	TYR	538	76.334	2.392	-7.764	1.00	44.36	A	C
ATOM	2854	CZ	TYR	538	76.431	3.199	-8.890	1.00	44.98	A	C

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ATOM	2855	OH	TYR	538	75.392	3.234	-9.800	1.00	45.09	A	O
ATOM	2856	C	TYR	538	78.116	3.849	-4.157	1.00	36.71	A	C
ATOM	2857	O	TYR	538	78.030	2.825	-3.480	1.00	39.13	A	O
ATOM	2858	N	ASN	539	77.108	4.705	-4.306	1.00	35.35	A	N
ATOM	2859	CA	ASN	539	75.832	4.455	-3.645	1.00	34.82	A	C
ATOM	2860	CB	ASN	539	75.972	4.628	-2.131	1.00	31.75	A	C
ATOM	2861	CG	ASN	539	74.760	4.141	-1.383	1.00	30.63	A	C
ATOM	2862	OD1	ASN	539	73.931	3.436	-1.944	1.00	32.09	A	O
ATOM	2863	ND2	ASN	539	74.650	4.503	-0.110	1.00	28.63	A	N
ATOM	2864	C	ASN	539	74.678	5.307	-4.159	1.00	36.74	A	C
ATOM	2865	O	ASN	539	74.760	6.536	-4.169	1.00	38.55	A	O
ATOM	2866	N	LYS	540	73.609	4.639	-4.594	1.00	38.42	A	N
ATOM	2867	CA	LYS	540	72.408	5.303	-5.108	1.00	39.36	A	C
ATOM	2868	CB	LYS	540	71.718	4.427	-6.162	1.00	38.57	A	C
ATOM	2869	CG	LYS	540	72.500	4.266	-7.459	1.00	40.52	A	C
ATOM	2870	CD	LYS	540	71.673	3.565	-8.531	1.00	41.55	A	C
ATOM	2871	CE	LYS	540	71.798	2.035	-8.501	1.00	41.22	A	C
ATOM	2872	NZ	LYS	540	72.973	1.523	-9.281	1.00	39.96	A	N
ATOM	2873	C	LYS	540	71.461	5.543	-3.941	1.00	40.79	A	C
ATOM	2874	O	LYS	540	70.777	4.620	-3.498	1.00	41.57	A	O
ATOM	2875	N	VAL	541	71.410	6.778	-3.445	1.00	42.33	A	N
ATOM	2876	CA	VAL	541	70.553	7.094	-2.303	1.00	43.43	A	C
ATOM	2877	CB	VAL	541	71.383	7.451	-1.042	1.00	44.82	A	C
ATOM	2878	CG1	VAL	541	72.368	8.564	-1.350	1.00	45.52	A	C
ATOM	2879	CG2	VAL	541	70.458	7.862	0.105	1.00	46.00	A	C
ATOM	2880	C	VAL	541	69.532	8.192	-2.523	1.00	42.67	A	C
ATOM	2881	O	VAL	541	69.847	9.265	-3.017	1.00	42.60	A	O
ATOM	2882	N	PRO	542	68.277	7.918	-2.164	1.00	43.04	A	N
ATOM	2883	CD	PRO	542	67.729	6.576	-1.912	1.00	42.89	A	C
ATOM	2884	CA	PRO	542	67.198	8.891	-2.313	1.00	43.92	A	C
ATOM	2885	CB	PRO	542	65.944	8.025	-2.150	1.00	43.43	A	C
ATOM	2886	CG	PRO	542	66.405	6.664	-2.583	1.00	42.53	A	C
ATOM	2887	C	PRO	542	67.281	9.955	-1.218	1.00	43.85	A	C
ATOM	2888	O	PRO	542	67.323	9.625	-0.035	1.00	44.42	A	O
ATOM	2889	N	VAL	543	67.349	11.222	-1.613	1.00	44.16	A	N
ATOM	2890	CA	VAL	543	67.408	12.313	-0.643	1.00	45.52	A	C
ATOM	2891	CB	VAL	543	68.502	13.322	-0.988	1.00	44.27	A	C
ATOM	2892	CG1	VAL	543	69.858	12.680	-0.832	1.00	44.52	A	C
ATOM	2893	CG2	VAL	543	68.302	13.841	-2.395	1.00	44.10	A	C
ATOM	2894	C	VAL	543	66.077	13.041	-0.592	1.00	46.97	A	C
ATOM	2895	O	VAL	543	65.284	12.952	-1.523	1.00	47.22	A	O
ATOM	2896	N	GLU	544	65.840	13.779	0.487	1.00	49.17	A	N
ATOM	2897	CA	GLU	544	64.590	14.510	0.630	1.00	51.56	A	C
ATOM	2898	CB	GLU	544	64.477	15.147	2.021	1.00	53.32	A	C
ATOM	2899	CG	GLU	544	64.318	14.118	3.149	1.00	56.61	A	C
ATOM	2900	CD	GLU	544	63.540	14.651	4.347	1.00	58.44	A	C
ATOM	2901	OE1	GLU	544	64.171	14.944	5.394	1.00	58.51	A	O
ATOM	2902	OE2	GLU	544	62.293	14.757	4.242	1.00	59.02	A	O
ATOM	2903	C	GLU	544	64.378	15.548	-0.469	1.00	52.13	A	C
ATOM	2904	O	GLU	544	65.336	16.078	-1.035	1.00	51.65	A	O
ATOM	2905	N	LYS	545	63.105	15.786	-0.780	1.00	53.25	A	N
ATOM	2906	CA	LYS	545	62.660	16.733	-1.806	1.00	53.52	A	C
ATOM	2907	CB	LYS	545	61.179	17.065	-1.580	1.00	57.08	A	C
ATOM	2908	CG	LYS	545	60.607	18.168	-2.466	1.00	60.02	A	C
ATOM	2909	CD	LYS	545	59.166	18.476	-2.063	1.00	63.38	A	C
ATOM	2910	CE	LYS	545	58.570	19.612	-2.891	1.00	65.43	A	C
ATOM	2911	NZ	LYS	545	57.144	19.880	-2.534	1.00	66.28	A	N
ATOM	2912	C	LYS	545	63.466	18.022	-1.862	1.00	51.81	A	C
ATOM	2913	O	LYS	545	63.876	18.456	-2.937	1.00	51.92	A	O
ATOM	2914	N	ARG	546	63.681	18.634	-0.703	1.00	49.47	A	N
ATOM	2915	CA	ARG	546	64.429	19.873	-0.627	1.00	47.54	A	C
ATOM	2916	CB	ARG	546	64.159	20.558	0.703	1.00	49.59	A	C
ATOM	2917	CG	ARG	546	63.270	21.773	0.563	1.00	53.29	A	C

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ATOM	2918	CD	ARG	546	64.028	22.903	-0.139	1.00	55.54	A	C
ATOM	2919	NE	ARG	546	63.207	24.046	-0.553	1.00	58.56	A	N
ATOM	2920	CZ	ARG	546	62.169	24.554	0.116	1.00	59.65	A	C
ATOM	2921	NH1	ARG	546	61.763	24.027	1.266	1.00	59.49	A	N
ATOM	2922	NH2	ARG	546	61.571	25.648	-0.344	1.00	60.03	A	N
ATOM	2923	C	ARG	546	65.926	19.739	-0.873	1.00	45.86	A	C
ATOM	2924	O	ARG	546	66.526	20.621	-1.477	1.00	45.29	A	O
ATOM	2925	N	VAL	547	66.520	18.626	-0.436	1.00	44.43	A	N
ATOM	2926	CA	VAL	547	67.959	18.376	-0.606	1.00	41.31	A	C
ATOM	2927	CB	VAL	547	68.407	17.091	0.128	1.00	41.28	A	C
ATOM	2928	CG1	VAL	547	69.864	16.802	-0.159	1.00	41.60	A	C
ATOM	2929	CG2	VAL	547	68.191	17.224	1.622	1.00	40.34	A	C
ATOM	2930	C	VAL	547	68.363	18.245	-2.069	1.00	39.80	A	C
ATOM	2931	O	VAL	547	69.429	18.706	-2.460	1.00	39.68	A	O
ATOM	2932	N	PHE	548	67.512	17.589	-2.855	1.00	37.87	A	N
ATOM	2933	CA	PHE	548	67.733	17.367	-4.285	1.00	36.44	A	C
ATOM	2934	CB	PHE	548	66.600	16.492	-4.842	1.00	35.21	A	C
ATOM	2935	CG	PHE	548	66.847	15.972	-6.235	1.00	33.83	A	C
ATOM	2936	CD1	PHE	548	67.347	14.681	-6.431	1.00	34.18	A	C
ATOM	2937	CD2	PHE	548	66.582	16.763	-7.349	1.00	31.64	A	C
ATOM	2938	CE1	PHE	548	67.580	14.188	-7.711	1.00	32.56	A	C
ATOM	2939	CE2	PHE	548	66.810	16.284	-8.630	1.00	31.71	A	C
ATOM	2940	CZ	PHE	548	67.311	14.991	-8.813	1.00	32.97	A	C
ATOM	2941	C	PHE	548	67.811	18.672	-5.083	1.00	36.96	A	C
ATOM	2942	O	PHE	548	68.644	18.808	-5.978	1.00	36.84	A	O
ATOM	2943	N	LYS	549	66.926	19.616	-4.764	1.00	37.41	A	N
ATOM	2944	CA	LYS	549	66.865	20.905	-5.444	1.00	38.44	A	C
ATOM	2945	CB	LYS	549	65.572	21.633	-5.077	1.00	40.15	A	C
ATOM	2946	CG	LYS	549	64.313	20.835	-5.381	1.00	42.52	A	C
ATOM	2947	CD	LYS	549	63.049	21.668	-5.164	1.00	45.71	A	C
ATOM	2948	CE	LYS	549	61.785	20.894	-5.559	1.00	46.37	A	C
ATOM	2949	NZ	LYS	549	61.795	20.442	-6.987	1.00	46.27	A	N
ATOM	2950	C	LYS	549	68.079	21.781	-5.141	1.00	38.97	A	C
ATOM	2951	O	LYS	549	68.565	22.507	-6.010	1.00	40.26	A	O
ATOM	2952	N	ASN	550	68.554	21.730	-3.901	1.00	38.69	A	N
ATOM	2953	CA	ASN	550	69.733	22.490	-3.499	1.00	36.90	A	C
ATOM	2954	CB	ASN	550	70.001	22.303	-2.007	1.00	35.73	A	C
ATOM	2955	CG	ASN	550	69.125	23.164	-1.144	1.00	34.62	A	C
ATOM	2956	OD1	ASN	550	69.512	24.263	-0.764	1.00	37.03	A	O
ATOM	2957	ND2	ASN	550	67.953	22.664	-0.800	1.00	34.29	A	N
ATOM	2958	C	ASN	550	70.947	21.997	-4.302	1.00	36.64	A	C
ATOM	2959	O	ASN	550	71.687	22.798	-4.878	1.00	37.52	A	O
ATOM	2960	N	LEU	551	71.127	20.677	-4.357	1.00	34.75	A	N
ATOM	2961	CA	LEU	551	72.230	20.076	-5.089	1.00	34.36	A	C
ATOM	2962	CB	LEU	551	72.174	18.557	-4.988	1.00	33.41	A	C
ATOM	2963	CG	LEU	551	72.618	17.963	-3.653	1.00	34.06	A	C
ATOM	2964	CD1	LEU	551	72.369	16.479	-3.672	1.00	33.49	A	C
ATOM	2965	CD2	LEU	551	74.089	18.258	-3.399	1.00	33.19	A	C
ATOM	2966	C	LEU	551	72.249	20.499	-6.550	1.00	35.38	A	C
ATOM	2967	O	LEU	551	73.275	20.374	-7.224	1.00	36.59	A	O
ATOM	2968	N	GLN	552	71.113	20.992	-7.043	1.00	35.20	A	N
ATOM	2969	CA	GLN	552	71.023	21.451	-8.423	1.00	34.10	A	C
ATOM	2970	CB	GLN	552	69.599	21.342	-8.948	1.00	32.77	A	C
ATOM	2971	CG	GLN	552	69.086	19.930	-8.936	1.00	32.63	A	C
ATOM	2972	CD	GLN	552	67.931	19.703	-9.886	1.00	31.17	A	C
ATOM	2973	OE1	GLN	552	66.772	19.926	-9.533	1.00	29.15	A	O
ATOM	2974	NE2	GLN	552	68.241	19.221	-11.093	1.00	29.87	A	N
ATOM	2975	C	GLN	552	71.525	22.880	-8.533	1.00	34.41	A	C
ATOM	2976	O	GLN	552	72.066	23.275	-9.567	1.00	35.99	A	O
ATOM	2977	N	LEU	553	71.328	23.662	-7.477	1.00	33.58	A	N
ATOM	2978	CA	LEU	553	71.813	25.036	-7.464	1.00	33.57	A	C
ATOM	2979	CB	LEU	553	71.150	25.848	-6.343	1.00	33.39	A	C
ATOM	2980	CG	LEU	553	69.713	26.388	-6.422	1.00	31.82	A	C

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ATOM	2981	CD1	LEU	553	68.877	25.724	-7.522	1.00	31.45	A	C
ATOM	2982	CD2	LEU	553	69.078	26.210	-5.047	1.00	29.59	A	C
ATOM	2983	C	LEU	553	73.320	24.983	-7.221	1.00	33.80	A	C
ATOM	2984	O	LEU	553	74.067	25.824	-7.722	1.00	35.41	A	O
ATOM	2985	N	PHE	554	73.770	23.977	-6.474	1.00	33.32	A	N
ATOM	2986	CA	PHE	554	75.192	23.846	-6.174	1.00	33.14	A	C
ATOM	2987	CB	PHE	554	75.435	22.846	-5.038	1.00	31.54	A	C
ATOM	2988	CG	PHE	554	74.715	23.183	-3.755	1.00	29.91	A	C
ATOM	2989	CD1	PHE	554	74.275	24.474	-3.497	1.00	28.73	A	C
ATOM	2990	CD2	PHE	554	74.431	22.190	-2.827	1.00	30.05	A	C
ATOM	2991	CE1	PHE	554	73.560	24.770	-2.349	1.00	28.20	A	C
ATOM	2992	CE2	PHE	554	73.716	22.478	-1.670	1.00	29.12	A	C
ATOM	2993	CZ	PHE	554	73.278	23.773	-1.435	1.00	29.05	A	C
ATOM	2994	C	PHE	554	75.982	23.455	-7.409	1.00	34.11	A	C
ATOM	2995	O	PHE	554	77.133	23.848	-7.561	1.00	35.07	A	O
ATOM	2996	N	MET	555	75.355	22.699	-8.300	1.00	35.69	A	N
ATOM	2997	CA	MET	555	76.001	22.267	-9.535	1.00	37.92	A	C
ATOM	2998	CB	MET	555	75.531	20.865	-9.904	1.00	36.59	A	C
ATOM	2999	CG	MET	555	76.124	19.782	-9.051	1.00	35.68	A	C
ATOM	3000	SD	MET	555	75.610	18.159	-9.609	1.00	36.83	A	S
ATOM	3001	CE	MET	555	74.280	17.954	-8.590	1.00	34.09	A	C
ATOM	3002	C	MET	555	75.765	23.216	-10.713	1.00	40.23	A	C
ATOM	3003	O	MET	555	76.374	23.055	-11.773	1.00	39.83	A	O
ATOM	3004	N	GLU	556	74.899	24.209	-10.501	1.00	43.97	A	N
ATOM	3005	CA	GLU	556	74.517	25.220	-11.496	1.00	47.62	A	C
ATOM	3006	CB	GLU	556	73.616	26.266	-10.831	1.00	49.85	A	C
ATOM	3007	CG	GLU	556	72.846	27.170	-11.785	1.00	53.91	A	C
ATOM	3008	CD	GLU	556	71.740	26.441	-12.529	1.00	55.58	A	C
ATOM	3009	OE1	GLU	556	70.931	25.741	-11.877	1.00	55.69	A	O
ATOM	3010	OE2	GLU	556	71.678	26.577	-13.769	1.00	56.81	A	O
ATOM	3011	C	GLU	556	75.700	25.922	-12.182	1.00	48.77	A	C
ATOM	3012	O	GLU	556	76.519	26.566	-11.523	1.00	48.25	A	O
ATOM	3013	N	ASN	557	75.728	25.832	-13.514	1.00	50.29	A	N
ATOM	3014	CA	ASN	557	76.775	26.402	-14.374	1.00	51.54	A	C
ATOM	3015	CB	ASN	557	76.412	27.823	-14.871	1.00	52.79	A	C
ATOM	3016	CG	ASN	557	76.135	28.807	-13.743	1.00	53.46	A	C
ATOM	3017	OD1	ASN	557	75.059	29.415	-13.685	1.00	52.66	A	O
ATOM	3018	ND2	ASN	557	77.112	28.987	-12.858	1.00	53.58	A	N
ATOM	3019	C	ASN	557	78.227	26.314	-13.878	1.00	51.79	A	C
ATOM	3020	O	ASN	557	79.013	27.257	-14.008	1.00	51.47	A	O
ATOM	3021	N	LYS	558	78.567	25.164	-13.304	1.00	52.21	A	N
ATOM	3022	CA	LYS	558	79.918	24.904	-12.815	1.00	52.08	A	C
ATOM	3023	CB	LYS	558	79.915	24.414	-11.362	1.00	51.82	A	C
ATOM	3024	CG	LYS	558	79.675	25.461	-10.299	1.00	51.11	A	C
ATOM	3025	CD	LYS	558	79.739	24.818	-8.926	1.00	50.58	A	C
ATOM	3026	CE	LYS	558	79.495	25.825	-7.826	1.00	51.75	A	C
ATOM	3027	NZ	LYS	558	78.123	26.427	-7.850	1.00	53.89	A	N
ATOM	3028	C	LYS	558	80.483	23.794	-13.678	1.00	52.27	A	C
ATOM	3029	O	LYS	558	79.748	22.918	-14.133	1.00	52.35	A	O
ATOM	3030	N	GLN	559	81.788	23.843	-13.910	1.00	52.14	A	N
ATOM	3031	CA	GLN	559	82.468	22.826	-14.694	1.00	51.91	A	C
ATOM	3032	CB	GLN	559	83.866	23.318	-15.062	1.00	53.84	A	C
ATOM	3033	CG	GLN	559	83.879	24.433	-16.089	1.00	55.90	A	C
ATOM	3034	CD	GLN	559	83.412	23.960	-17.455	1.00	57.79	A	C
ATOM	3035	OE1	GLN	559	84.193	23.405	-18.235	1.00	57.81	A	O
ATOM	3036	NE2	GLN	559	82.130	24.166	-17.748	1.00	58.43	A	N
ATOM	3037	C	GLN	559	82.542	21.571	-13.825	1.00	51.37	A	C
ATOM	3038	O	GLN	559	82.365	21.650	-12.612	1.00	51.19	A	O
ATOM	3039	N	PRO	560	82.777	20.397	-14.437	1.00	51.11	A	N
ATOM	3040	CD	PRO	560	82.851	20.214	-15.899	1.00	50.96	A	C
ATOM	3041	CA	PRO	560	82.873	19.097	-13.750	1.00	50.59	A	C
ATOM	3042	CB	PRO	560	83.253	18.148	-14.882	1.00	50.74	A	C
ATOM	3043	CG	PRO	560	82.539	18.748	-16.053	1.00	50.85	A	C



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ATOM	3044	C	PRO	560	83.850	18.986	-12.569	1.00	50.05	A	C
ATOM	3045	O	PRO	560	83.574	18.271	-11.598	1.00	48.19	A	O
ATOM	3046	N	GLU	561	84.993	19.665	-12.667	1.00	50.06	A	N
ATOM	3047	CA	GLU	561	86.005	19.644	-11.607	1.00	49.77	A	C
ATOM	3048	CB	GLU	561	87.414	19.517	-12.195	1.00	52.31	A	C
ATOM	3049	CG	GLU	561	87.568	20.084	-13.588	1.00	56.71	A	C
ATOM	3050	CD	GLU	561	87.369	21.583	-13.630	1.00	60.08	A	C
ATOM	3051	OE1	GLU	561	86.216	22.040	-13.450	1.00	60.76	A	O
ATOM	3052	OE2	GLU	561	88.370	22.305	-13.840	1.00	62.05	A	O
ATOM	3053	C	GLU	561	85.932	20.802	-10.605	1.00	47.86	A	C
ATOM	3054	O	GLU	561	86.892	21.075	-9.888	1.00	47.10	A	O
ATOM	3055	N	ASP	562	84.802	21.500	-10.588	1.00	46.26	A	N
ATOM	3056	CA	ASP	562	84.583	22.584	-9.638	1.00	45.22	A	C
ATOM	3057	CB	ASP	562	83.553	23.588	-10.166	1.00	47.18	A	C
ATOM	3058	CG	ASP	562	84.195	24.781	-10.863	1.00	48.74	A	C
ATOM	3059	OD1	ASP	562	85.409	25.014	-10.655	1.00	49.57	A	O
ATOM	3060	OD2	ASP	562	83.479	25.491	-11.608	1.00	48.91	A	O
ATOM	3061	C	ASP	562	84.077	21.953	-8.348	1.00	43.63	A	C
ATOM	3062	O	ASP	562	83.565	20.834	-8.350	1.00	43.72	A	O
ATOM	3063	N	ASP	563	84.197	22.676	-7.246	1.00	41.95	A	N
ATOM	3064	CA	ASP	563	83.769	22.147	-5.961	1.00	40.44	A	C
ATOM	3065	CB	ASP	563	84.506	22.864	-4.825	1.00	40.61	A	C
ATOM	3066	CG	ASP	563	85.998	22.512	-4.762	1.00	41.18	A	C
ATOM	3067	OD1	ASP	563	86.642	22.234	-5.806	1.00	40.52	A	O
ATOM	3068	OD2	ASP	563	86.530	22.523	-3.637	1.00	42.32	A	O
ATOM	3069	C	ASP	563	82.265	22.220	-5.756	1.00	39.37	A	C
ATOM	3070	O	ASP	563	81.666	23.281	-5.896	1.00	40.75	A	O
ATOM	3071	N	LEU	564	81.653	21.078	-5.452	1.00	38.00	A	N
ATOM	3072	CA	LEU	564	80.212	21.008	-5.213	1.00	36.01	A	C
ATOM	3073	CB	LEU	564	79.825	19.603	-4.755	1.00	36.04	A	C
ATOM	3074	CG	LEU	564	78.398	19.378	-4.253	1.00	35.72	A	C
ATOM	3075	CD1	LEU	564	77.409	19.816	-5.310	1.00	35.96	A	C
ATOM	3076	CD2	LEU	564	78.194	17.912	-3.911	1.00	34.88	A	C
ATOM	3077	C	LEU	564	79.824	22.010	-4.142	1.00	35.41	A	C
ATOM	3078	O	LEU	564	78.904	22.799	-4.324	1.00	34.39	A	O
ATOM	3079	N	PHE	565	80.556	21.983	-3.033	1.00	35.90	A	N
ATOM	3080	CA	PHE	565	80.306	22.889	-1.920	1.00	35.56	A	C
ATOM	3081	CB	PHE	565	80.404	22.145	-0.582	1.00	34.09	A	C
ATOM	3082	CG	PHE	565	79.403	21.048	-0.424	1.00	31.58	A	C
ATOM	3083	CD1	PHE	565	78.045	21.312	-0.523	1.00	31.35	A	C
ATOM	3084	CD2	PHE	565	79.821	19.741	-0.209	1.00	31.44	A	C
ATOM	3085	CE1	PHE	565	77.112	20.291	-0.419	1.00	30.88	A	C
ATOM	3086	CE2	PHE	565	78.899	18.706	-0.100	1.00	30.86	A	C
ATOM	3087	CZ	PHE	565	77.539	18.982	-0.207	1.00	31.56	A	C
ATOM	3088	C	PHE	565	81.231	24.107	-1.906	1.00	36.01	A	C
ATOM	3089	O	PHE	565	81.956	24.337	-0.930	1.00	35.66	A	O
ATOM	3090	N	ASP	566	81.246	24.861	-3.005	1.00	36.59	A	N
ATOM	3091	CA	ASP	566	82.048	26.084	-3.065	1.00	37.65	A	C
ATOM	3092	CB	ASP	566	81.862	26.795	-4.421	1.00	38.58	A	C
ATOM	3093	CG	ASP	566	80.424	27.254	-4.663	1.00	41.15	A	C
ATOM	3094	OD1	ASP	566	79.529	26.382	-4.740	1.00	41.95	A	O
ATOM	3095	OD2	ASP	566	80.187	28.484	-4.763	1.00	41.23	A	O
ATOM	3096	C	ASP	566	81.436	26.908	-1.937	1.00	37.52	A	C
ATOM	3097	O	ASP	566	80.214	26.999	-1.858	1.00	40.30	A	O
ATOM	3098	N	ARG	567	82.264	27.436	-1.043	1.00	35.69	A	N
ATOM	3099	CA	ARG	567	81.818	28.217	0.122	1.00	36.07	A	C
ATOM	3100	CB	ARG	567	80.374	28.740	0.016	1.00	38.55	A	C
ATOM	3101	CG	ARG	567	80.115	29.757	-1.084	1.00	43.92	A	C
ATOM	3102	CD	ARG	567	78.624	29.847	-1.375	1.00	47.52	A	C
ATOM	3103	NE	ARG	567	78.301	30.891	-2.347	1.00	51.08	A	N
ATOM	3104	CZ	ARG	567	78.401	32.199	-2.115	1.00	51.81	A	C
ATOM	3105	NH1	ARG	567	78.822	32.649	-0.936	1.00	51.74	A	N
ATOM	3106	NH2	ARG	567	78.078	33.062	-3.071	1.00	52.73	A	N

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ATOM	3107	C	ARG	567	81.900	27.377	1.380	1.00	34.01	A	C
ATOM	3108	O	ARG	567	81.683	27.894	2.477	1.00	34.76	A	O
ATOM	3109	N	LEU	568	82.166	26.080	1.229	1.00	31.25	A	N
ATOM	3110	CA	LEU	568	82.277	25.209	2.393	1.00	27.46	A	C
ATOM	3111	CB	LEU	568	81.231	24.090	2.355	1.00	24.86	A	C
ATOM	3112	CG	LEU	568	80.900	23.528	3.742	1.00	24.13	A	C
ATOM	3113	CD1	LEU	568	80.355	24.617	4.622	1.00	24.37	A	C
ATOM	3114	CD2	LEU	568	79.900	22.424	3.648	1.00	24.63	A	C
ATOM	3115	C	LEU	568	83.683	24.646	2.633	1.00	26.55	A	C
ATOM	3116	O	LEU	568	84.451	24.387	1.697	1.00	25.72	A	O
ATOM	3117	N	ASN	569	84.000	24.491	3.917	1.00	25.71	A	N
ATOM	3118	CA	ASN	569	85.276	23.987	4.415	1.00	24.01	A	C
ATOM	3119	CB	ASN	569	86.039	25.102	5.124	1.00	25.21	A	C
ATOM	3120	CG	ASN	569	87.006	25.790	4.255	1.00	26.71	A	C
ATOM	3121	OD1	ASN	569	87.367	26.934	4.517	1.00	26.25	A	O
ATOM	3122	ND2	ASN	569	87.476	25.097	3.221	1.00	28.50	A	N
ATOM	3123	C	ASN	569	84.982	23.036	5.535	1.00	23.47	A	C
ATOM	3124	O	ASN	569	83.924	23.104	6.154	1.00	22.88	A	O
ATOM	3125	N	THR	570	85.996	22.261	5.897	1.00	24.11	A	N
ATOM	3126	CA	THR	570	85.898	21.361	7.039	1.00	23.00	A	C
ATOM	3127	CB	THR	570	87.016	20.335	7.021	1.00	21.84	A	C
ATOM	3128	OG1	THR	570	88.255	21.000	6.760	1.00	24.31	A	O
ATOM	3129	CG2	THR	570	86.773	19.336	5.943	1.00	20.23	A	C
ATOM	3130	C	THR	570	86.053	22.286	8.255	1.00	22.21	A	C
ATOM	3131	O	THR	570	85.566	21.991	9.342	1.00	22.65	A	O
ATOM	3132	N	GLY	571	86.680	23.439	8.019	1.00	20.99	A	N
ATOM	3133	CA	GLY	571	86.882	24.433	9.056	1.00	21.03	A	C
ATOM	3134	C	GLY	571	85.617	25.202	9.420	1.00	21.04	A	C
ATOM	3135	O	GLY	571	85.399	25.537	10.587	1.00	20.56	A	O
ATOM	3136	N	ILE	572	84.792	25.501	8.418	1.00	20.67	A	N
ATOM	3137	CA	ILE	572	83.533	26.221	8.626	1.00	18.99	A	C
ATOM	3138	CB	ILE	572	82.975	26.771	7.288	1.00	18.73	A	C
ATOM	3139	CG2	ILE	572	81.602	27.368	7.492	1.00	19.49	A	C
ATOM	3140	CG1	ILE	572	83.921	27.830	6.717	1.00	19.77	A	C
ATOM	3141	CD1	ILE	572	83.743	28.088	5.226	1.00	18.28	A	C
ATOM	3142	C	ILE	572	82.503	25.287	9.256	1.00	18.54	A	C
ATOM	3143	O	ILE	572	81.834	25.654	10.227	1.00	15.87	A	O
ATOM	3144	N	LEU	573	82.425	24.065	8.717	1.00	19.52	A	N
ATOM	3145	CA	LEU	573	81.496	23.027	9.177	1.00	19.43	A	C
ATOM	3146	CB	LEU	573	81.668	21.766	8.329	1.00	19.92	A	C
ATOM	3147	CG	LEU	573	80.626	20.644	8.308	1.00	21.38	A	C
ATOM	3148	CD1	LEU	573	81.066	19.614	7.309	1.00	19.62	A	C
ATOM	3149	CD2	LEU	573	80.469	19.992	9.657	1.00	22.16	A	C
ATOM	3150	C	LEU	573	81.743	22.697	10.639	1.00	19.89	A	C
ATOM	3151	O	LEU	573	80.801	22.498	11.403	1.00	18.03	A	O
ATOM	3152	N	ASN	574	83.014	22.620	11.028	1.00	21.54	A	N
ATOM	3153	CA	ASN	574	83.339	22.322	12.415	1.00	21.83	A	C
ATOM	3154	CB	ASN	574	84.747	21.772	12.563	1.00	18.84	A	C
ATOM	3155	CG	ASN	574	84.815	20.283	12.294	1.00	20.10	A	C
ATOM	3156	OD1	ASN	574	83.900	19.529	12.642	1.00	20.54	A	O
ATOM	3157	ND2	ASN	574	85.901	19.850	11.671	1.00	20.00	A	N
ATOM	3158	C	ASN	574	83.111	23.493	13.343	1.00	23.54	A	C
ATOM	3159	O	ASN	574	82.597	23.297	14.441	1.00	23.57	A	O
ATOM	3160	N	LYS	575	83.459	24.707	12.907	1.00	26.85	A	N
ATOM	3161	CA	LYS	575	83.237	25.886	13.745	1.00	29.25	A	C
ATOM	3162	CB	LYS	575	83.720	27.171	13.075	1.00	32.58	A	C
ATOM	3163	CG	LYS	575	85.234	27.245	12.859	1.00	38.98	A	C
ATOM	3164	CD	LYS	575	86.037	26.994	14.150	1.00	43.24	A	C
ATOM	3165	CE	LYS	575	87.540	27.271	13.959	1.00	45.33	A	C
ATOM	3166	NZ	LYS	575	87.852	28.715	13.676	1.00	44.49	A	N
ATOM	3167	C	LYS	575	81.744	25.956	14.014	1.00	29.13	A	C
ATOM	3168	O	LYS	575	81.328	26.267	15.133	1.00	29.19	A	O
ATOM	3169	N	HIS	576	80.951	25.584	13.004	1.00	28.76	A	N

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ATOM	3170	CA	HIS	576	79.494	25.560	13.121	1.00	27.46	A	AC
ATOM	3171	CB	HIS	576	78.829	25.267	11.768	1.00	28.53	A	C
ATOM	3172	CG	HIS	576	77.350	25.013	11.850	1.00	31.47	A	C
ATOM	3173	CD2	HIS	576	76.343	25.746	12.384	1.00	32.46	A	C
ATOM	3174	ND1	HIS	576	76.762	23.867	11.350	1.00	33.19	A	N
ATOM	3175	CE1	HIS	576	75.460	23.905	11.576	1.00	32.50	A	C
ATOM	3176	NE2	HIS	576	75.180	25.033	12.202	1.00	31.76	A	N
ATOM	3177	C	HIS	576	79.085	24.527	14.172	1.00	26.39	A	C
ATOM	3178	O	HIS	576	78.473	24.898	15.156	1.00	27.89	A	O
ATOM	3179	N	LEU	577	79.474	23.262	14.009	1.00	25.10	A	N
ATOM	3180	CA	LEU	577	79.122	22.216	14.984	1.00	24.87	A	C
ATOM	3181	CB	LEU	577	79.723	20.870	14.575	1.00	25.01	A	C
ATOM	3182	CG	LEU	577	79.220	20.136	13.335	1.00	24.21	A	C
ATOM	3183	CD1	LEU	577	80.187	19.029	12.986	1.00	21.55	A	C
ATOM	3184	CD2	LEU	577	77.829	19.590	13.589	1.00	23.87	A	C
ATOM	3185	C	LEU	577	79.531	22.528	16.432	1.00	25.58	A	C
ATOM	3186	O	LEU	577	78.836	22.153	17.372	1.00	23.86	A	O
ATOM	3187	N	GLN	578	80.678	23.181	16.604	1.00	28.46	A	N
ATOM	3188	CA	GLN	578	81.176	23.562	17.930	1.00	32.26	A	C
ATOM	3189	CB	GLN	578	82.569	24.201	17.804	1.00	33.14	A	C
ATOM	3190	CG	GLN	578	83.180	24.720	19.108	1.00	34.22	A	C
ATOM	3191	CD	GLN	578	83.466	23.620	20.123	1.00	37.15	A	C
ATOM	3192	OE1	GLN	578	83.786	22.469	19.766	1.00	35.93	A	O
ATOM	3193	NE2	GLN	578	83.361	23.973	21.403	1.00	37.49	A	N
ATOM	3194	C	GLN	578	80.199	24.528	18.621	1.00	34.44	A	C
ATOM	3195	O	GLN	578	80.096	24.561	19.854	1.00	34.13	A	O
ATOM	3196	N	ASP	579	79.491	25.320	17.820	1.00	36.89	A	N
ATOM	3197	CA	ASP	579	78.514	26.250	18.358	1.00	39.63	A	C
ATOM	3198	CB	ASP	579	78.257	27.396	17.386	1.00	42.93	A	C
ATOM	3199	CG	ASP	579	78.496	28.755	18.018	1.00	46.56	A	C
ATOM	3200	OD1	ASP	579	78.193	28.914	19.225	1.00	48.32	A	O
ATOM	3201	OD2	ASP	579	78.998	29.659	17.312	1.00	48.10	A	O
ATOM	3202	C	ASP	579	77.212	25.534	18.703	1.00	39.81	A	C
ATOM	3203	O	ASP	579	76.373	26.069	19.419	1.00	40.70	A	O
ATOM	3204	N	LEU	580	77.038	24.327	18.179	1.00	40.32	A	N
ATOM	3205	CA	LEU	580	75.850	23.550	18.480	1.00	41.29	A	C
ATOM	3206	CB	LEU	580	75.566	22.530	17.377	1.00	40.97	A	C
ATOM	3207	CG	LEU	580	74.485	22.945	16.377	1.00	41.50	A	C
ATOM	3208	CD1	LEU	580	74.489	22.011	15.181	1.00	40.58	A	C
ATOM	3209	CD2	LEU	580	73.116	22.953	17.065	1.00	41.69	A	C
ATOM	3210	C	LEU	580	76.074	22.860	19.817	1.00	42.24	A	C
ATOM	3211	O	LEU	580	75.479	23.240	20.819	1.00	44.58	A	O
ATOM	3212	N	MET	581	76.981	21.891	19.838	1.00	42.50	A	N
ATOM	3213	CA	MET	581	77.313	21.139	21.046	1.00	41.65	A	C
ATOM	3214	CB	MET	581	77.072	19.651	20.796	1.00	42.46	A	C
ATOM	3215	CG	MET	581	77.247	18.736	21.991	1.00	43.61	A	C
ATOM	3216	SD	MET	581	77.050	16.990	21.518	1.00	45.10	A	S
ATOM	3217	CE	MET	581	78.705	16.605	20.955	1.00	45.35	A	C
ATOM	3218	C	MET	581	78.791	21.394	21.322	1.00	41.53	A	C
ATOM	3219	O	MET	581	79.546	21.723	20.411	1.00	41.12	A	O
ATOM	3220	N	GLU	582	79.205	21.227	22.571	1.00	41.75	A	N
ATOM	3221	CA	GLU	582	80.590	21.467	22.952	1.00	41.98	A	C
ATOM	3222	CB	GLU	582	80.665	21.745	24.456	1.00	44.79	A	C
ATOM	3223	CG	GLU	582	81.842	22.625	24.899	1.00	48.65	A	C
ATOM	3224	CD	GLU	582	81.414	23.778	25.825	1.00	51.21	A	C
ATOM	3225	OE1	GLU	582	80.470	23.603	26.640	1.00	51.37	A	O
ATOM	3226	OE2	GLU	582	82.027	24.866	25.728	1.00	51.29	A	O
ATOM	3227	C	GLU	582	81.504	20.303	22.581	1.00	40.84	A	C
ATOM	3228	O	GLU	582	81.288	19.170	23.014	1.00	40.62	A	O
ATOM	3229	N	GLY	583	82.521	20.589	21.772	1.00	38.70	A	N
ATOM	3230	CA	GLY	583	83.464	19.560	21.366	1.00	35.82	A	C
ATOM	3231	C	GLY	583	82.944	18.646	20.280	1.00	34.09	A	C
ATOM	3232	O	GLY	583	83.361	17.496	20.166	1.00	34.85	A	O

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ATOM	3233	N	LEU	584	82.347	19.172	19.458	1.00	32.32	A	N
ATOM	3234	CA	LEU	584	81.457	18.408	18.370	1.00	29.81	A	C
ATOM	3235	CB	LEU	584	80.008	18.839	18.176	1.00	29.12	A	C
ATOM	3236	CG	LEU	584	79.199	18.094	17.125	1.00	30.83	A	C
ATOM	3237	CD1	LEU	584	79.147	16.606	17.453	1.00	30.69	A	C
ATOM	3238	CD2	LEU	584	77.799	18.672	17.082	1.00	32.53	A	C
ATOM	3239	C	LEU	584	82.232	18.584	17.065	1.00	27.84	A	C
ATOM	3240	O	LEU	584	82.639	19.694	16.724	1.00	27.73	A	O
ATOM	3241	N	THR	585	82.485	17.478	16.369	1.00	25.34	A	N
ATOM	3242	CA	THR	585	83.194	17.525	15.092	1.00	22.27	A	C
ATOM	3243	CB	THR	585	84.695	17.173	15.233	1.00	24.27	A	C
ATOM	3244	OG1	THR	585	84.837	15.800	15.596	1.00	24.88	A	O
ATOM	3245	CG2	THR	585	85.378	18.061	16.275	1.00	24.48	A	C
ATOM	3246	C	THR	585	82.554	16.520	14.155	1.00	18.53	A	C
ATOM	3247	O	THR	585	81.943	15.571	14.614	1.00	17.85	A	O
ATOM	3248	N	ALA	586	82.714	16.710	12.849	1.00	16.10	A	N
ATOM	3249	CA	ALA	586	82.121	15.800	11.863	1.00	15.52	A	C
ATOM	3250	CB	ALA	586	82.535	16.215	10.464	1.00	14.96	A	C
ATOM	3251	C	ALA	586	82.449	14.317	12.107	1.00	15.37	A	C
ATOM	3252	O	ALA	586	81.660	13.422	11.794	1.00	13.98	A	O
ATOM	3253	N	LYS	587	83.631	14.080	12.658	1.00	16.10	A	N
ATOM	3254	CA	LYS	587	84.102	12.749	12.985	1.00	16.01	A	C
ATOM	3255	CB	LYS	587	85.488	12.861	13.636	1.00	18.95	A	C
ATOM	3256	CG	LYS	587	86.186	11.524	13.862	1.00	26.12	A	C
ATOM	3257	CD	LYS	587	87.548	11.691	14.542	1.00	28.42	A	C
ATOM	3258	CE	LYS	587	87.439	11.732	16.067	1.00	31.11	A	C
ATOM	3259	NZ	LYS	587	87.091	10.401	16.658	1.00	31.85	A	N
ATOM	3260	C	LYS	587	83.125	12.054	13.954	1.00	15.41	A	C
ATOM	3261	O	LYS	587	82.850	10.856	13.818	1.00	17.62	A	O
ATOM	3262	N	VAL	588	82.585	12.823	14.904	1.00	12.46	A	N
ATOM	3263	CA	VAL	588	81.674	12.300	15.923	1.00	9.66	A	C
ATOM	3264	CB	VAL	588	81.172	13.397	16.874	1.00	6.87	A	C
ATOM	3265	CG1	VAL	588	80.534	12.772	18.090	1.00	3.42	A	C
ATOM	3266	CG2	VAL	588	82.298	14.327	17.273	1.00	6.33	A	C
ATOM	3267	C	VAL	588	80.460	11.613	15.332	1.00	10.91	A	C
ATOM	3268	O	VAL	588	80.015	10.591	15.847	1.00	12.23	A	O
ATOM	3269	N	PHE	589	79.927	12.179	14.253	1.00	11.15	A	N
ATOM	3270	CA	PHE	589	78.760	11.611	13.595	1.00	11.37	A	C
ATOM	3271	CB	PHE	589	78.304	12.496	12.439	1.00	10.11	A	C
ATOM	3272	CG	PHE	589	77.699	13.791	12.886	1.00	11.77	A	C
ATOM	3273	CD1	PHE	589	78.506	14.916	13.102	1.00	10.92	A	C
ATOM	3274	CD2	PHE	589	76.326	13.889	13.120	1.00	10.55	A	C
ATOM	3275	CE1	PHE	589	77.966	16.110	13.544	1.00	9.18	A	C
ATOM	3276	CE2	PHE	589	75.770	15.089	13.563	1.00	9.83	A	C
ATOM	3277	CZ	PHE	589	76.593	16.202	13.777	1.00	10.99	A	C
ATOM	3278	C	PHE	589	79.017	10.182	13.128	1.00	12.71	A	C
ATOM	3279	O	PHE	589	78.076	9.395	12.976	1.00	12.50	A	O
ATOM	3280	N	ARG	590	80.288	9.843	12.913	1.00	13.56	A	N
ATOM	3281	CA	ARG	590	80.619	8.486	12.513	1.00	15.65	A	C
ATOM	3282	CB	ARG	590	81.983	8.423	11.850	1.00	17.17	A	C
ATOM	3283	CG	ARG	590	81.934	8.686	10.368	1.00	20.09	A	C
ATOM	3284	CD	ARG	590	83.116	8.045	9.677	1.00	20.30	A	C
ATOM	3285	NE	ARG	590	82.762	7.672	8.317	1.00	21.72	A	N
ATOM	3286	CZ	ARG	590	83.462	6.835	7.565	1.00	22.79	A	C
ATOM	3287	NH1	ARG	590	84.565	6.287	8.044	1.00	22.65	A	N
ATOM	3288	NH2	ARG	590	83.054	6.544	6.335	1.00	23.16	A	N
ATOM	3289	C	ARG	590	80.559	7.554	13.723	1.00	16.22	A	C
ATOM	3290	O	ARG	590	79.853	6.541	13.704	1.00	16.84	A	O
ATOM	3291	N	THR	591	81.250	7.934	14.794	1.00	15.83	A	N
ATOM	3292	CA	THR	591	81.253	7.151	16.019	1.00	15.70	A	C
ATOM	3293	CB	THR	591	82.106	7.842	17.107	1.00	15.78	A	C
ATOM	3294	OG1	THR	591	83.403	8.139	16.570	1.00	18.37	A	O
ATOM	3295	CG2	THR	591	82.276	6.947	18.324	1.00	12.89	A	C

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ATOM	3296	C	THR	591	79.801	7.004	16.481	1.00	16.59	A	C
ATOM	3297	O	THR	591	79.350	5.908	16.783	1.00	16.65	A	O
ATOM	3298	N	TYR	592	79.046	8.097	16.465	1.00	18.64	A	N
ATOM	3299	CA	TYR	592	77.642	8.049	16.871	1.00	20.84	A	C
ATOM	3300	CB	TYR	592	77.006	9.433	16.739	1.00	20.17	A	C
ATOM	3301	CG	TYR	592	75.495	9.434	16.752	1.00	24.04	A	C
ATOM	3302	CD1	TYR	592	74.776	9.443	17.952	1.00	24.96	A	C
ATOM	3303	CE1	TYR	592	73.373	9.454	17.951	1.00	25.28	A	C
ATOM	3304	CD2	TYR	592	74.775	9.434	15.550	1.00	25.56	A	C
ATOM	3305	CE2	TYR	592	73.384	9.445	15.536	1.00	25.72	A	C
ATOM	3306	CZ	TYR	592	72.687	9.454	16.734	1.00	26.39	A	C
ATOM	3307	OH	TYR	592	71.309	9.443	16.692	1.00	26.45	A	O
ATOM	3308	C	TYR	592	76.867	7.009	16.052	1.00	21.93	A	C
ATOM	3309	O	TYR	592	76.472	5.970	16.579	1.00	19.12	A	O
ATOM	3310	N	ASN	593	76.703	7.279	14.756	1.00	24.47	A	N
ATOM	3311	CA	ASN	593	75.987	6.388	13.841	1.00	25.94	A	C
ATOM	3312	CB	ASN	593	76.165	6.833	12.388	1.00	29.06	A	C
ATOM	3313	CG	ASN	593	75.022	7.709	11.900	1.00	31.74	A	C
ATOM	3314	OD1	ASN	593	75.089	8.941	11.962	1.00	32.45	A	O
ATOM	3315	ND2	ASN	593	73.959	7.072	11.412	1.00	33.39	A	N
ATOM	3316	C	ASN	593	76.400	4.937	13.966	1.00	25.53	A	C
ATOM	3317	O	ASN	593	75.566	4.048	13.840	1.00	25.18	A	O
ATOM	3318	N	ALA	594	77.682	4.698	14.226	1.00	25.30	A	N
ATOM	3319	CA	ALA	594	78.190	3.333	14.374	1.00	24.80	A	C
ATOM	3320	CB	ALA	594	79.711	3.341	14.456	1.00	24.52	A	C
ATOM	3321	C	ALA	594	77.607	2.637	15.599	1.00	24.24	A	C
ATOM	3322	O	ALA	594	76.839	1.683	15.486	1.00	23.47	A	O
ATOM	3323	N	SER	595	77.974	3.153	16.765	1.00	23.83	A	N
ATOM	3324	CA	SER	595	77.542	2.620	18.046	1.00	23.73	A	C
ATOM	3325	CB	SER	595	78.105	3.484	19.173	1.00	24.07	A	C
ATOM	3326	OG	SER	595	79.511	3.619	19.047	1.00	22.23	A	O
ATOM	3327	C	SER	595	76.030	2.516	18.170	1.00	23.11	A	C
ATOM	3328	O	SER	595	75.498	1.438	18.407	1.00	24.39	A	O
ATOM	3329	N	ILE	596	75.343	3.637	18.004	1.00	22.93	A	N
ATOM	3330	CA	ILE	596	73.889	3.652	18.092	1.00	23.17	A	C
ATOM	3331	CB	ILE	596	73.300	5.066	17.772	1.00	24.47	A	C
ATOM	3332	CG2	ILE	596	73.525	5.447	16.316	1.00	26.63	A	C
ATOM	3333	CG1	ILE	596	71.809	5.092	18.072	1.00	26.39	A	C
ATOM	3334	CD1	ILE	596	71.161	6.416	17.759	1.00	30.54	A	C
ATOM	3335	C	ILE	596	73.313	2.586	17.165	1.00	21.46	A	C
ATOM	3336	O	ILE	596	72.311	1.975	17.485	1.00	23.32	A	O
ATOM	3337	N	THR	597	73.970	2.336	16.040	1.00	20.17	A	N
ATOM	3338	CA	THR	597	73.505	1.306	15.124	1.00	20.57	A	C
ATOM	3339	CB	THR	597	74.112	1.471	13.732	1.00	21.45	A	C
ATOM	3340	OG1	THR	597	73.639	2.699	13.164	1.00	19.96	A	O
ATOM	3341	CG2	THR	597	73.746	0.266	12.818	1.00	18.18	A	C
ATOM	3342	C	THR	597	73.852	-0.084	15.648	1.00	21.43	A	C
ATOM	3343	O	THR	597	73.041	-0.991	15.552	1.00	19.94	A	O
ATOM	3344	N	LEU	598	75.069	-0.258	16.162	1.00	23.25	A	N
ATOM	3345	CA	LEU	598	75.471	-1.548	16.701	1.00	24.79	A	C
ATOM	3346	CB	LEU	598	76.886	-1.501	17.291	1.00	23.21	A	C
ATOM	3347	CG	LEU	598	77.248	-2.746	18.130	1.00	22.35	A	C
ATOM	3348	CD1	LEU	598	77.241	-3.991	17.275	1.00	21.11	A	C
ATOM	3349	CD2	LEU	598	78.588	-2.588	18.794	1.00	21.57	A	C
ATOM	3350	C	LEU	598	74.497	-1.939	17.795	1.00	26.91	A	C
ATOM	3351	O	LEU	598	73.963	-3.047	17.793	1.00	27.33	A	O
ATOM	3352	N	GLN	599	74.252	-1.002	18.707	1.00	28.88	A	N
ATOM	3353	CA	GLN	599	73.361	-1.230	19.834	1.00	32.32	A	C
ATOM	3354	CB	GLN	599	73.246	0.035	20.693	1.00	31.84	A	C
ATOM	3355	CG	GLN	599	72.403	-0.167	21.939	1.00	34.65	A	C
ATOM	3356	CD	GLN	599	72.227	1.094	22.751	1.00	36.58	A	C
ATOM	3357	OE1	GLN	599	71.424	1.961	22.397	1.00	38.51	A	O
ATOM	3358	NE2	GLN	599	72.957	1.195	23.863	1.00	36.02	A	N

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ATOM	3359	C	GLN	599	71.973	-1.724	19.420	1.00	35.04	A	C
ATOM	3360	O	GLN	599	71.515	-2.773	19.889	1.00	36.85	A	O
ATOM	3361	N	GLN	600	71.321	-0.985	18.527	1.00	36.63	A	N
ATOM	3362	CA	GLN	600	69.993	-1.341	18.058	1.00	37.96	A	C
ATOM	3363	CB	GLN	600	69.375	-0.181	17.276	1.00	38.66	A	C
ATOM	3364	CG	GLN	600	68.373	0.644	18.083	1.00	40.40	A	C
ATOM	3365	CD	GLN	600	67.104	-0.144	18.465	1.00	41.43	A	C
ATOM	3366	OE1	GLN	600	66.443	0.170	19.460	1.00	40.84	A	O
ATOM	3367	NE2	GLN	600	66.759	-1.161	17.667	1.00	40.56	A	N
ATOM	3368	C	GLN	600	69.936	-2.642	17.255	1.00	38.95	A	C
ATOM	3369	O	GLN	600	68.966	-3.389	17.364	1.00	40.41	A	O
ATOM	3370	N	GLN	601	70.964	-2.925	16.460	1.00	40.03	A	N
ATOM	3371	CA	GLN	601	70.979	-4.161	15.684	1.00	42.07	A	C
ATOM	3372	CB	GLN	601	72.059	-4.140	14.604	1.00	43.14	A	C
ATOM	3373	CG	GLN	601	71.718	-3.278	13.400	1.00	45.96	A	C
ATOM	3374	CD	GLN	601	70.377	-3.628	12.784	1.00	47.01	A	C
ATOM	3375	OE1	GLN	601	70.247	-4.635	12.084	1.00	47.25	A	O
ATOM	3376	NE2	GLN	601	69.370	-2.794	13.038	1.00	47.34	A	N
ATOM	3377	C	GLN	601	71.174	-5.355	16.602	1.00	43.04	A	C
ATOM	3378	O	GLN	601	70.673	-6.440	16.332	1.00	42.94	A	O
ATOM	3379	N	LEU	602	71.888	-5.145	17.702	1.00	44.33	A	N
ATOM	3380	CA	LEU	602	72.116	-6.211	18.667	1.00	45.58	A	C
ATOM	3381	CB	LEU	602	73.039	-5.734	19.784	1.00	43.73	A	C
ATOM	3382	CG	LEU	602	74.497	-5.572	19.383	1.00	41.87	A	C
ATOM	3383	CD1	LEU	602	75.243	-4.920	20.517	1.00	42.38	A	C
ATOM	3384	CD2	LEU	602	75.099	-6.916	19.029	1.00	39.99	A	C
ATOM	3385	C	LEU	602	70.794	-6.676	19.258	1.00	47.54	A	C
ATOM	3386	O	LEU	602	70.582	-7.869	19.454	1.00	47.48	A	O
ATOM	3387	N	LYS	603	69.904	-5.728	19.538	1.00	50.05	A	N
ATOM	3388	CA	LYS	603	68.597	-6.050	20.101	1.00	52.80	A	C
ATOM	3389	CB	LYS	603	67.899	-4.772	20.587	1.00	53.38	A	C
ATOM	3390	CG	LYS	603	67.567	-4.735	22.083	1.00	55.02	A	C
ATOM	3391	CD	LYS	603	68.817	-4.869	22.954	1.00	58.03	A	C
ATOM	3392	CE	LYS	603	68.622	-4.296	24.364	1.00	58.46	A	C
ATOM	3393	NZ	LYS	603	67.613	-5.026	25.189	1.00	59.45	A	N
ATOM	3394	C	LYS	603	67.744	-6.759	19.046	1.00	54.39	A	C
ATOM	3395	O	LYS	603	67.261	-7.875	19.267	1.00	54.02	A	O
ATOM	3396	N	GLU	604	67.652	-6.140	17.870	1.00	56.50	A	N
ATOM	3397	CA	GLU	604	66.862	-6.652	16.754	1.00	58.68	A	C
ATOM	3398	CB	GLU	604	66.770	-5.593	15.649	1.00	60.85	A	C
ATOM	3399	CG	GLU	604	65.611	-5.784	14.660	1.00	63.44	A	C
ATOM	3400	CD	GLU	604	65.504	-4.657	13.622	1.00	65.58	A	C
ATOM	3401	OE1	GLU	604	64.902	-4.891	12.551	1.00	65.74	A	O
ATOM	3402	OE2	GLU	604	66.014	-3.537	13.871	1.00	66.16	A	O
ATOM	3403	C	GLU	604	67.378	-7.958	16.172	1.00	59.04	A	C
ATOM	3404	O	GLU	604	66.618	-8.706	15.569	1.00	60.07	A	O
ATOM	3405	N	LEU	605	68.658	-8.246	16.357	1.00	59.67	A	N
ATOM	3406	CA	LEU	605	69.225	-9.475	15.820	1.00	60.63	A	C
ATOM	3407	CB	LEU	605	70.466	-9.171	14.983	1.00	59.91	A	C
ATOM	3408	CG	LEU	605	70.193	-8.527	13.625	1.00	59.91	A	C
ATOM	3409	CD1	LEU	605	71.492	-8.091	12.977	1.00	60.29	A	C
ATOM	3410	CD2	LEU	605	69.458	-9.515	12.736	1.00	60.82	A	C
ATOM	3411	C	LEU	605	69.546	-10.564	16.836	1.00	62.01	A	C
ATOM	3412	O	LEU	605	70.082	-11.605	16.459	1.00	62.51	A	O
ATOM	3413	N	THR	606	69.235	-10.339	18.112	1.00	63.25	A	N
ATOM	3414	CA	THR	606	69.518	-11.353	19.127	1.00	64.46	A	C
ATOM	3415	CB	THR	606	70.128	-10.764	20.432	1.00	64.65	A	C
ATOM	3416	OG1	THR	606	71.329	-10.049	20.126	1.00	64.90	A	O
ATOM	3417	CG2	THR	606	70.484	-11.886	21.408	1.00	64.47	A	C
ATOM	3418	C	THR	606	68.282	-12.160	19.493	1.00	65.33	A	C
ATOM	3419	O	THR	606	67.219	-11.604	19.780	1.00	65.60	A	O
ATOM	3420	N	ALA	607	68.433	-13.478	19.439	1.00	66.07	A	N
ATOM	3421	CA	ALA	607	67.370	-14.404	19.794	1.00	67.10	A	C

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ATOM	3422	CB	ALA	607	67.115	-15.359	18.652	1.00	66.90	A	C
ATOM	3423	C	ALA	607	67.905	-15.130	21.033	1.00	68.31	A	C
ATOM	3424	O	ALA	607	68.920	-15.834	20.957	1.00	67.48	A	O
ATOM	3425	N	PRO	608	67.237	-14.946	22.195	1.00	69.53	A	N
ATOM	3426	CD	PRO	608	65.965	-14.203	22.173	1.00	69.22	A	C
ATOM	3427	CA	PRO	608	67.487	-15.472	23.554	1.00	70.87	A	C
ATOM	3428	CB	PRO	608	66.221	-15.063	24.309	1.00	69.58	A	C
ATOM	3429	CG	PRO	608	65.801	-13.835	23.606	1.00	68.98	A	C
ATOM	3430	C	PRO	608	67.788	-16.966	23.753	1.00	72.97	A	C
ATOM	3431	O	PRO	608	68.818	-17.336	24.335	1.00	72.48	A	O
ATOM	3432	N	ASP	609	66.873	-17.818	23.301	1.00	75.02	A	N
ATOM	3433	CA	ASP	609	67.005	-19.270	23.438	1.00	76.38	A	C
ATOM	3434	CB	ASP	609	65.652	-19.928	23.154	1.00	77.99	A	C
ATOM	3435	CG	ASP	609	65.104	-19.580	21.776	1.00	79.27	A	C
ATOM	3436	OD1	ASP	609	65.002	-20.489	20.926	1.00	80.12	A	O
ATOM	3437	OD2	ASP	609	64.786	-18.388	21.539	1.00	78.98	A	O
ATOM	3438	C	ASP	609	68.075	-19.899	22.536	1.00	76.36	A	C
ATOM	3439	O	ASP	609	68.220	-21.124	22.494	1.00	76.40	A	O
ATOM	3440	N	GLU	610	68.815	-19.060	21.817	1.00	75.95	A	N
ATOM	3441	CA	GLU	610	69.849	-19.534	20.908	1.00	75.38	A	C
ATOM	3442	CB	GLU	610	70.108	-18.486	19.818	1.00	76.39	A	C
ATOM	3443	CG	GLU	610	69.118	-18.532	18.651	1.00	79.21	A	C
ATOM	3444	CD	GLU	610	67.675	-18.818	19.078	1.00	80.66	A	C
ATOM	3445	OE1	GLU	610	67.146	-18.100	19.955	1.00	80.98	A	O
ATOM	3446	OE2	GLU	610	67.066	-19.767	18.536	1.00	81.09	A	O
ATOM	3447	C	GLU	610	71.138	-19.870	21.629	1.00	73.96	A	C
ATOM	3448	O	GLU	610	71.469	-19.251	22.634	1.00	74.32	A	O
ATOM	3449	N	ASN	611	71.834	-20.891	21.143	1.00	72.09	A	N
ATOM	3450	CA	ASN	611	73.102	-21.284	21.737	1.00	70.47	A	C
ATOM	3451	CB	ASN	611	73.682	-22.498	21.009	1.00	70.98	A	C
ATOM	3452	CG	ASN	611	73.394	-23.801	21.724	1.00	71.50	A	C
ATOM	3453	OD1	ASN	611	73.224	-24.846	21.090	1.00	71.23	A	O
ATOM	3454	ND2	ASN	611	73.348	-23.750	23.054	1.00	71.40	A	N
ATOM	3455	C	ASN	611	74.070	-20.122	21.604	1.00	69.14	A	C
ATOM	3456	O	ASN	611	73.852	-19.212	20.806	1.00	69.01	A	O
ATOM	3457	N	ILE	612	75.135	-20.154	22.394	1.00	67.90	A	N
ATOM	3458	CA	ILE	612	76.148	-19.110	22.345	1.00	66.43	A	C
ATOM	3459	CB	ILE	612	77.239	-19.362	23.402	1.00	65.50	A	C
ATOM	3460	CG2	ILE	612	78.406	-18.413	23.215	1.00	65.92	A	C
ATOM	3461	CG1	ILE	612	76.626	-19.201	24.794	1.00	64.71	A	C
ATOM	3462	CD1	ILE	612	77.579	-19.498	25.922	1.00	65.43	A	C
ATOM	3463	C	ILE	612	76.729	-18.955	20.925	1.00	65.83	A	C
ATOM	3464	O	ILE	612	76.947	-17.830	20.465	1.00	66.54	A	O
ATOM	3465	N	PRO	613	77.001	-20.075	20.220	1.00	64.53	A	N
ATOM	3466	CD	PRO	613	77.152	-21.467	20.691	1.00	64.70	A	C
ATOM	3467	CA	PRO	613	77.540	-19.936	18.862	1.00	62.83	A	C
ATOM	3468	CB	PRO	613	77.713	-21.388	18.419	1.00	63.24	A	C
ATOM	3469	CG	PRO	613	78.138	-22.051	19.692	1.00	64.14	A	C
ATOM	3470	C	PRO	613	76.581	-19.174	17.945	1.00	60.13	A	C
ATOM	3471	O	PRO	613	77.010	-18.342	17.147	1.00	59.72	A	O
ATOM	3472	N	ALA	614	75.285	-19.436	18.090	1.00	57.48	A	N
ATOM	3473	CA	ALA	614	74.272	-18.765	17.277	1.00	55.43	A	C
ATOM	3474	CB	ALA	614	72.907	-19.385	17.516	1.00	55.37	A	C
ATOM	3475	C	ALA	614	74.220	-17.262	17.561	1.00	53.78	A	C
ATOM	3476	O	ALA	614	73.917	-16.462	16.671	1.00	53.63	A	O
ATOM	3477	N	LYS	615	74.513	-16.886	18.804	1.00	51.07	A	N
ATOM	3478	CA	LYS	615	74.496	-15.481	19.196	1.00	47.37	A	C
ATOM	3479	CB	LYS	615	74.484	-15.329	20.717	1.00	45.52	A	C
ATOM	3480	CG	LYS	615	73.115	-15.553	21.323	1.00	43.10	A	C
ATOM	3481	CD	LYS	615	73.145	-15.417	22.821	1.00	41.43	A	C
ATOM	3482	CE	LYS	615	71.753	-15.497	23.389	1.00	40.85	A	C
ATOM	3483	NZ	LYS	615	71.061	-16.718	22.912	1.00	40.63	A	N
ATOM	3484	C	LYS	615	75.646	-14.704	18.590	1.00	45.60	A	C

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ATOM	3485	O	LYS	615	75.477	-13.552	18.199	1.00	46.14	A	O
ATOM	3486	N	ILE	616	76.810	-15.336	18.497	1.00	43.25	A	N
ATOM	3487	CA	ILE	616	77.973	-14.683	17.913	1.00	41.53	A	C
ATOM	3488	CB	ILE	616	79.220	-15.576	18.035	1.00	40.81	A	C
ATOM	3489	CG2	ILE	616	80.391	-14.985	17.256	1.00	39.81	A	C
ATOM	3490	CG1	ILE	616	79.561	-15.762	19.516	1.00	40.10	A	C
ATOM	3491	CD1	ILE	616	80.692	-16.721	19.771	1.00	41.11	A	C
ATOM	3492	C	ILE	616	77.658	-14.363	16.453	1.00	41.15	A	C
ATOM	3493	O	ILE	616	78.049	-13.316	15.938	1.00	39.97	A	O
ATOM	3494	N	LEU	617	76.889	-15.251	15.823	1.00	41.61	A	N
ATOM	3495	CA	LEU	617	76.458	-15.108	14.429	1.00	40.56	A	C
ATOM	3496	CB	LEU	617	75.713	-16.372	13.994	1.00	39.15	A	C
ATOM	3497	CG	LEU	617	75.141	-16.557	12.588	1.00	38.47	A	C
ATOM	3498	CD1	LEU	617	73.784	-15.887	12.471	1.00	38.79	A	C
ATOM	3499	CD2	LEU	617	76.128	-16.069	11.548	1.00	37.62	A	C
ATOM	3500	C	LEU	617	75.538	-13.895	14.360	1.00	39.90	A	C
ATOM	3501	O	LEU	617	75.610	-13.085	13.438	1.00	38.91	A	O
ATOM	3502	N	SER	618	74.675	-13.778	15.356	1.00	39.62	A	N
ATOM	3503	CA	SER	618	73.771	-12.657	15.425	1.00	40.85	A	C
ATOM	3504	CB	SER	618	72.726	-12.898	16.511	1.00	41.33	A	C
ATOM	3505	OG	SER	618	71.922	-14.020	16.190	1.00	42.23	A	O
ATOM	3506	C	SER	618	74.587	-11.402	15.726	1.00	41.57	A	C
ATOM	3507	O	SER	618	74.242	-10.312	15.266	1.00	41.26	A	O
ATOM	3508	N	TYR	619	75.682	-11.573	16.473	1.00	42.33	A	N
ATOM	3509	CA	TYR	619	76.565	-10.461	16.839	1.00	42.46	A	C
ATOM	3510	CB	TYR	619	77.617	-10.886	17.877	1.00	41.97	A	C
ATOM	3511	CG	TYR	619	78.576	-9.769	18.271	1.00	41.28	A	C
ATOM	3512	CD1	TYR	619	78.142	-8.695	19.042	1.00	41.54	A	C
ATOM	3513	CE1	TYR	619	78.987	-7.628	19.339	1.00	41.82	A	C
ATOM	3514	CD2	TYR	619	79.895	-9.752	17.813	1.00	41.14	A	C
ATOM	3515	CE2	TYR	619	80.748	-8.689	18.107	1.00	41.01	A	C
ATOM	3516	CZ	TYR	619	80.283	-7.628	18.867	1.00	41.30	A	C
ATOM	3517	OH	TYR	619	81.094	-6.548	19.129	1.00	40.75	A	O
ATOM	3518	C	TYR	619	77.269	-9.936	15.605	1.00	42.83	A	C
ATOM	3519	O	TYR	619	77.217	-8.745	15.310	1.00	42.48	A	O
ATOM	3520	N	ASN	620	77.917	-10.838	14.880	1.00	43.49	A	N
ATOM	3521	CA	ASN	620	78.632	-10.465	13.673	1.00	44.02	A	C
ATOM	3522	CB	ASN	620	79.387	-11.666	13.113	1.00	45.73	A	C
ATOM	3523	CG	ASN	620	80.613	-12.011	13.939	1.00	48.38	A	C
ATOM	3524	OD1	ASN	620	80.552	-12.055	15.170	1.00	49.54	A	O
ATOM	3525	ND2	ASN	620	81.742	-12.237	13.267	1.00	48.55	A	N
ATOM	3526	C	ASN	620	77.731	-9.839	12.617	1.00	43.34	A	C
ATOM	3527	O	ASN	620	78.195	-9.040	11.813	1.00	44.00	A	O
ATOM	3528	N	ARG	621	76.445	-10.185	12.625	1.00	42.50	A	N
ATOM	3529	CA	ARG	621	75.508	-9.611	11.664	1.00	41.79	A	C
ATOM	3530	CB	ARG	621	74.148	-10.321	11.713	1.00	42.37	A	C
ATOM	3531	CG	ARG	621	74.078	-11.664	10.983	1.00	43.27	A	C
ATOM	3532	CD	ARG	621	72.619	-12.092	10.827	1.00	43.97	A	C
ATOM	3533	NE	ARG	621	72.420	-13.540	10.713	1.00	42.54	A	N
ATOM	3534	CZ	ARG	621	72.537	-14.238	9.588	1.00	41.48	A	C
ATOM	3535	NH1	ARG	621	72.871	-13.635	8.461	1.00	41.68	A	N
ATOM	3536	NH2	ARG	621	72.237	-15.530	9.575	1.00	42.12	A	N
ATOM	3537	C	ARG	621	75.328	-8.115	11.938	1.00	41.22	A	C
ATOM	3538	O	ARG	621	75.335	-7.302	11.014	1.00	41.22	A	O
ATOM	3539	N	ALA	622	75.159	-7.760	13.209	1.00	40.56	A	N
ATOM	3540	CA	ALA	622	74.996	-6.366	13.608	1.00	39.77	A	C
ATOM	3541	CB	ALA	622	74.682	-6.278	15.084	1.00	40.36	A	C
ATOM	3542	C	ALA	622	76.284	-5.621	13.304	1.00	39.34	A	C
ATOM	3543	O	ALA	622	76.263	-4.562	12.691	1.00	39.02	A	O
ATOM	3544	N	ASN	623	77.402	-6.211	13.722	1.00	39.57	A	N
ATOM	3545	CA	ASN	623	78.740	-5.662	13.509	1.00	40.65	A	C
ATOM	3546	CB	ASN	623	79.789	-6.657	14.037	1.00	42.09	A	C
ATOM	3547	CG	ASN	623	81.177	-6.044	14.202	1.00	42.95	A	C



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ATOM	3548	OD1	ASN	623	81.716	-5.999	15.308	1.00	43.76	A	O
ATOM	3549	ND2	ASN	623	81.776	-5.617	13.100	1.00	43.37	A	N
ATOM	3550	C	ASN	623	78.926	-5.463	12.009	1.00	40.81	A	C
ATOM	3551	O	ASN	623	79.589	-4.527	11.576	1.00	41.38	A	O
ATOM	3552	N	ARG	624	78.294	-6.329	11.224	1.00	41.13	A	N
ATOM	3553	CA	ARG	624	78.374	-6.278	9.767	1.00	41.37	A	C
ATOM	3554	CB	ARG	624	77.869	-7.600	9.179	1.00	41.80	A	C
ATOM	3555	CG	ARG	624	78.017	-7.761	7.674	1.00	41.88	A	C
ATOM	3556	CD	ARG	624	77.822	-9.217	7.288	1.00	42.42	A	C
ATOM	3557	NE	ARG	624	78.777	-10.082	7.985	1.00	42.82	A	N
ATOM	3558	CZ	ARG	624	78.437	-11.090	8.783	1.00	42.47	A	C
ATOM	3559	NH1	ARG	624	77.158	-11.379	8.992	1.00	43.52	A	N
ATOM	3560	NH2	ARG	624	79.376	-11.801	9.385	1.00	41.26	A	N
ATOM	3561	C	ARG	624	77.592	-5.103	9.187	1.00	41.01	A	C
ATOM	3562	O	ARG	624	78.042	-4.452	8.242	1.00	40.63	A	O
ATOM	3563	N	ALA	625	76.440	-4.814	9.783	1.00	41.39	A	N
ATOM	3564	CA	ALA	625	75.597	-3.726	9.325	1.00	42.91	A	C
ATOM	3565	CB	ALA	625	74.204	-3.875	9.910	1.00	42.32	A	C
ATOM	3566	C	ALA	625	76.178	-2.349	9.655	1.00	45.27	A	C
ATOM	3567	O	ALA	625	75.531	-1.329	9.432	1.00	45.61	A	O
ATOM	3568	N	VAL	626	77.412	-2.317	10.147	1.00	48.12	A	N
ATOM	3569	CA	VAL	626	78.060	-1.062	10.508	1.00	51.48	A	C
ATOM	3570	CB	VAL	626	78.320	-1.003	12.030	1.00	51.62	A	C
ATOM	3571	CG1	VAL	626	78.741	0.400	12.449	1.00	51.76	A	C
ATOM	3572	CG2	VAL	626	77.081	-1.426	12.795	1.00	51.94	A	C
ATOM	3573	C	VAL	626	79.389	-0.863	9.776	1.00	54.58	A	C
ATOM	3574	O	VAL	626	80.231	-0.067	10.204	1.00	55.27	A	O
ATOM	3575	N	ALA	627	79.571	-1.549	8.651	1.00	58.12	A	N
ATOM	3576	CA	ALA	627	80.825	-1.419	7.909	1.00	61.08	A	C
ATOM	3577	CB	ALA	627	81.556	-2.755	7.889	1.00	60.77	A	C
ATOM	3578	C	ALA	627	80.748	-0.825	6.495	1.00	63.48	A	C
ATOM	3579	O	ALA	627	79.742	-0.982	5.783	1.00	63.86	A	O
ATOM	3580	N	ASN	631	81.813	-0.093	6.146	1.00	65.08	A	N
ATOM	3581	CA	ASN	631	82.014	0.561	4.837	1.00	65.40	A	C
ATOM	3582	CB	ASN	631	81.826	2.076	4.938	1.00	65.67	A	C
ATOM	3583	CG	ASN	631	82.139	2.802	3.623	1.00	66.44	A	C
ATOM	3584	OD1	ASN	631	82.375	4.011	3.621	1.00	67.25	A	O
ATOM	3585	ND2	ASN	631	82.140	2.069	2.507	1.00	65.10	A	N
ATOM	3586	C	ASN	631	83.456	0.238	4.440	1.00	64.76	A	C
ATOM	3587	O	ASN	631	83.951	0.593	3.361	1.00	64.29	A	O
ATOM	3588	N	HIS	632	84.121	-0.432	5.367	1.00	64.08	A	N
ATOM	3589	CA	HIS	632	85.487	-0.867	5.202	1.00	63.29	A	C
ATOM	3590	CB	HIS	632	86.134	-0.939	6.601	1.00	61.34	A	C
ATOM	3591	CG	HIS	632	85.674	0.152	7.535	1.00	58.17	A	C
ATOM	3592	CD2	HIS	632	86.099	1.427	7.708	1.00	56.50	A	C
ATOM	3593	ND1	HIS	632	84.645	-0.028	8.434	1.00	56.57	A	N
ATOM	3594	CE1	HIS	632	84.460	1.081	9.125	1.00	55.45	A	C
ATOM	3595	NE2	HIS	632	85.331	1.980	8.705	1.00	54.83	A	N
ATOM	3596	C	HIS	632	85.300	-2.244	4.525	1.00	64.11	A	C
ATOM	3597	O	HIS	632	84.548	-3.072	5.034	1.00	64.58	A	O
ATOM	3598	N	GLN	633	85.841	-2.418	3.311	1.00	65.42	A	N
ATOM	3599	CA	GLN	633	85.662	-3.675	2.560	1.00	68.15	A	C
ATOM	3600	CB	GLN	633	84.983	-3.419	1.215	1.00	66.52	A	C
ATOM	3601	CG	GLN	633	85.374	-2.152	0.498	1.00	66.90	A	C
ATOM	3602	CD	GLN	633	84.349	-1.719	-0.537	1.00	68.34	A	C
ATOM	3603	OE1	GLN	633	84.715	-1.402	-1.664	1.00	69.74	A	O
ATOM	3604	NE2	GLN	633	83.071	-1.645	-0.147	1.00	68.36	A	N
ATOM	3605	C	GLN	633	86.843	-4.643	2.342	1.00	70.51	A	C
ATOM	3606	O	GLN	633	88.025	-4.240	2.351	1.00	67.18	A	O
ATOM	3607	N	ALA	634	86.428	-5.875	1.983	1.00	73.08	A	N
ATOM	3608	CA	ALA	634	87.280	-7.041	1.704	1.00	74.98	A	C
ATOM	3609	CB	ALA	634	88.537	-6.635	0.977	1.00	76.70	A	C
ATOM	3610	C	ALA	634	87.657	-7.710	3.031	1.00	74.25	A	C

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ATOM	3611	O	ALA	634	87.590	-7.087	4.099	1.00	79.64	A	O
ATOM	3612	N	ALA	635	87.979	-8.999	2.967	1.00	72.05	A	N
ATOM	3613	CA	ALA	635	88.456	-9.776	4.126	1.00	68.95	A	C
ATOM	3614	CB	ALA	635	87.530	-9.646	5.428	1.00	69.09	A	C
ATOM	3615	C	ALA	635	88.510	-11.173	3.617	1.00	70.71	A	C
ATOM	3616	O	ALA	635	87.641	-12.016	3.934	1.00	70.82	A	O
ATOM	3617	N	ALA	636	89.499	-11.370	2.735	1.00	71.15	A	N
ATOM	3618	CA	ALA	636	89.768	-12.656	2.083	1.00	73.34	A	C
ATOM	3619	CB	ALA	636	89.609	-13.829	3.108	1.00	74.68	A	C
ATOM	3620	C	ALA	636	88.747	-12.781	0.986	1.00	73.27	A	C
ATOM	3621	O	ALA	636	87.765	-13.500	1.140	1.00	73.18	A	O
ATOM	3622	N	ALA	637	88.884	-11.956	-0.044	1.00	72.78	A	N
ATOM	3623	CA	ALA	637	87.932	-11.976	-1.142	1.00	71.80	A	C
ATOM	3624	CB	ALA	637	88.058	-10.702	-1.985	1.00	70.62	A	C
ATOM	3625	C	ALA	637	88.161	-13.199	-1.983	1.00	72.23	A	C
ATOM	3626	O	ALA	637	87.206	-13.862	-2.429	1.00	71.94	A	O
ATOM	3627	N	ALA	638	89.445	-13.445	-2.231	1.00	73.63	A	N
ATOM	3628	CA	ALA	638	89.942	-14.577	-2.990	1.00	76.20	A	C
ATOM	3629	CB	ALA	638	90.757	-14.081	-4.195	1.00	74.24	A	C
ATOM	3630	C	ALA	638	90.803	-15.418	-2.053	1.00	78.62	A	C
ATOM	3631	O	ALA	638	92.015	-15.551	-2.241	1.00	77.26	A	O
ATOM	3632	N	ALA	639	90.161	-15.886	-0.986	1.00	81.92	A	N
ATOM	3633	CA	ALA	639	90.781	-16.704	0.042	1.00	83.58	A	C
ATOM	3634	CB	ALA	639	91.578	-15.813	1.036	1.00	85.79	A	C
ATOM	3635	C	ALA	639	89.678	-17.453	0.785	1.00	84.21	A	C
ATOM	3636	O	ALA	639	89.747	-18.676	0.962	1.00	87.85	A	O
ATOM	3637	N	ALA	640	88.649	-16.715	1.201	1.00	86.02	A	N
ATOM	3638	CA	ALA	640	87.519	-17.272	1.947	1.00	89.18	A	C
ATOM	3639	CB	ALA	640	86.856	-16.176	2.770	1.00	86.00	A	C
ATOM	3640	C	ALA	640	86.505	-17.929	1.028	1.00	94.16	A	C
ATOM	3641	O	ALA	640	85.320	-18.040	1.367	1.00	88.25	A	O
ATOM	3642	N	GLU	641	86.954	-18.288	-0.175	1.00	99.46	A	N
ATOM	3643	CA	GLU	641	86.082	-18.941	-1.147	1.00	104.35	A	C
ATOM	3644	CB	GLU	641	85.783	-18.056	-2.357	1.00	102.57	A	C
ATOM	3645	CG	GLU	641	84.270	-17.810	-2.546	1.00	102.32	A	C
ATOM	3646	CD	GLU	641	83.461	-19.110	-2.586	1.00	102.24	A	C
ATOM	3647	OE1	GLU	641	83.690	-19.933	-3.502	1.00	99.20	A	O
ATOM	3648	OE2	GLU	641	82.592	-19.305	-1.704	1.00	98.86	A	O
ATOM	3649	C	GLU	641	86.597	-20.304	-1.585	1.00	104.72	A	C
ATOM	3650	O	GLU	641	85.822	-21.257	-1.723	1.00	105.67	A	O
ATOM	3651	N	LYS	642	87.906	-20.420	-1.785	1.00	104.75	A	N
ATOM	3652	CA	LYS	642	88.498	-21.702	-2.164	1.00	102.23	A	C
ATOM	3653	CB	LYS	642	89.911	-21.526	-2.731	1.00	102.33	A	C
ATOM	3654	CG	LYS	642	90.606	-22.848	-3.094	1.00	102.81	A	C
ATOM	3655	CD	LYS	642	91.430	-22.766	-4.385	1.00	104.73	A	C
ATOM	3656	CE	LYS	642	90.567	-22.835	-5.648	1.00	106.66	A	C
ATOM	3657	NZ	LYS	642	89.894	-24.156	-5.880	1.00	109.20	A	N
ATOM	3658	C	LYS	642	88.501	-22.609	-0.914	1.00	101.05	A	C
ATOM	3659	O	LYS	642	88.029	-23.763	-0.948	1.00	99.79	A	O
ATOM	3660	N	SER	643	88.995	-22.072	0.202	1.00	101.64	A	N
ATOM	3661	CA	SER	643	89.051	-22.792	1.466	1.00	102.83	A	C
ATOM	3662	CB	SER	643	90.223	-22.306	2.328	1.00	103.17	A	C
ATOM	3663	OG	SER	643	89.970	-21.051	2.942	1.00	105.52	A	O
ATOM	3664	C	SER	643	87.711	-22.675	2.208	1.00	103.50	A	C
ATOM	3665	O	SER	643	87.667	-22.546	3.442	1.00	102.94	A	O
ATOM	3666	N	MET	644	86.632	-22.664	1.422	1.00	104.21	A	N
ATOM	3667	CA	MET	644	85.255	-22.597	1.899	1.00	104.79	A	C
ATOM	3668	CB	MET	644	84.548	-21.325	1.404	1.00	105.11	A	C
ATOM	3669	CG	MET	644	83.085	-21.177	1.853	1.00	105.35	A	C
ATOM	3670	SD	MET	644	82.800	-20.189	3.348	1.00	105.49	A	S
ATOM	3671	CE	MET	644	83.469	-21.257	4.598	1.00	105.84	A	C
ATOM	3672	C	MET	644	84.555	-23.805	1.302	1.00	104.99	A	C
ATOM	3673	O	MET	644	83.714	-24.432	1.944	1.00	104.89	A	O

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ATOM	3674	N	MET	645	84.884	-24.087	0.042	1.00105.22	A	N
ATOM	3675	CA	MET	645	84.347	-25.245	-0.672	1.00105.20	A	C
ATOM	3676	CB	MET	645	84.813	-25.249	-2.142	1.00106.21	A	C
ATOM	3677	CG	MET	645	84.481	-23.988	-2.949	1.00107.91	A	C
ATOM	3678	SD	MET	645	85.178	-23.939	-4.653	1.00109.45	A	S
ATOM	3679	CE	MET	645	83.764	-24.546	-5.645	1.00108.69	A	C
ATOM	3680	C	MET	645	84.928	-26.470	0.046	1.00104.78	A	C
ATOM	3681	O	MET	645	84.489	-27.598	-0.163	1.00104.72	A	O
ATOM	3682	N	ASN	646	85.932	-26.209	0.885	1.00104.25	A	N
ATOM	3683	CA	ASN	646	86.631	-27.224	1.670	1.00103.26	A	C
ATOM	3684	CB	ASN	646	88.124	-26.898	1.723	1.00104.12	A	C
ATOM	3685	CG	ASN	646	88.704	-26.602	0.353	1.00104.91	A	C
ATOM	3686	OD1	ASN	646	88.277	-27.172	-0.652	1.00105.03	A	O
ATOM	3687	ND2	ASN	646	89.679	-25.700	0.305	1.00105.67	A	N
ATOM	3688	C	ASN	646	86.085	-27.342	3.094	1.00102.14	A	C
ATOM	3689	O	ASN	646	86.413	-28.290	3.802	1.00101.80	A	O
ATOM	3690	N	LEU	647	85.299	-26.357	3.527	1.00100.97	A	N
ATOM	3691	CA	LEU	647	84.697	-26.383	4.864	1.00 99.69	A	C
ATOM	3692	CB	LEU	647	84.553	-24.959	5.421	1.00 98.80	A	C
ATOM	3693	CG	LEU	647	84.592	-24.760	6.944	1.00 97.99	A	C
ATOM	3694	CD1	LEU	647	84.766	-23.287	7.246	1.00 97.68	A	C
ATOM	3695	CD2	LEU	647	83.342	-25.297	7.631	1.00 97.67	A	C
ATOM	3696	C	LEU	647	83.328	-27.068	4.751	1.00 99.25	A	C
ATOM	3697	O	LEU	647	82.743	-27.508	5.746	1.00 98.04	A	O
ATOM	3698	N	GLN	648	82.841	-27.171	3.517	1.00 99.08	A	N
ATOM	3699	CA	GLN	648	81.565	-27.812	3.216	1.00 98.70	A	C
ATOM	3700	CB	GLN	648	81.200	-27.568	1.745	1.00 98.93	A	C
ATOM	3701	CG	GLN	648	79.742	-27.210	1.495	1.00 99.17	A	C
ATOM	3702	CD	GLN	648	78.806	-28.378	1.720	1.00 99.83	A	C
ATOM	3703	OE1	GLN	648	78.686	-29.262	0.871	1.00 99.79	A	O
ATOM	3704	NE2	GLN	648	78.134	-28.388	2.868	1.00 99.65	A	N
ATOM	3705	C	GLN	648	81.726	-29.309	3.483	1.00 98.10	A	C
ATOM	3706	O	GLN	648	80.899	-29.916	4.167	1.00 98.52	A	O
ATOM	3707	N	THR	649	82.819	-29.883	2.974	1.00 97.09	A	N
ATOM	3708	CA	THR	649	83.127	-31.303	3.154	1.00 96.06	A	C
ATOM	3709	CB	THR	649	84.125	-31.821	2.082	1.00 96.27	A	C
ATOM	3710	OG1	THR	649	85.328	-31.044	2.117	1.00 96.29	A	O
ATOM	3711	CG2	THR	649	83.506	-31.751	0.689	1.00 96.59	A	C
ATOM	3712	C	THR	649	83.689	-31.589	4.548	1.00 95.07	A	C
ATOM	3713	O	THR	649	84.606	-32.396	4.718	1.00 95.34	A	O
ATOM	3714	N	LYS	650	83.142	-30.890	5.536	1.00 94.02	A	N
ATOM	3715	CA	LYS	650	83.525	-31.040	6.936	1.00 92.88	A	C
ATOM	3716	CB	LYS	650	84.533	-29.963	7.361	1.00 94.27	A	C
ATOM	3717	CG	LYS	650	85.951	-30.145	6.812	1.00 94.56	A	C
ATOM	3718	CD	LYS	650	86.872	-29.029	7.297	1.00 95.45	A	C
ATOM	3719	CE	LYS	650	88.302	-29.224	6.811	1.00 96.21	A	C
ATOM	3720	NZ	LYS	650	89.219	-28.167	7.324	1.00 96.13	A	N
ATOM	3721	C	LYS	650	82.253	-30.916	7.759	1.00 91.31	A	C
ATOM	3722	O	LYS	650	82.240	-31.230	8.947	1.00 90.05	A	O
ATOM	3723	N	ILE	651	81.200	-30.409	7.117	1.00 90.21	A	N
ATOM	3724	CA	ILE	651	79.890	-30.246	7.739	1.00 88.85	A	C
ATOM	3725	CB	ILE	651	79.102	-29.058	7.149	1.00 87.99	A	C
ATOM	3726	CG2	ILE	651	77.721	-28.991	7.774	1.00 87.67	A	C
ATOM	3727	CG1	ILE	651	79.840	-27.746	7.400	1.00 87.78	A	C
ATOM	3728	CD1	ILE	651	79.052	-26.518	6.997	1.00 87.22	A	C
ATOM	3729	C	ILE	651	79.106	-31.503	7.435	1.00 88.30	A	C
ATOM	3730	O	ILE	651	78.377	-32.019	8.278	1.00 88.21	A	O
ATOM	3731	N	ASP	652	79.256	-31.979	6.205	1.00 87.96	A	N
ATOM	3732	CA	ASP	652	78.578	-33.182	5.763	1.00 87.98	A	C
ATOM	3733	CB	ASP	652	78.652	-33.294	4.243	1.00 88.62	A	C
ATOM	3734	CG	ASP	652	77.908	-32.167	3.543	1.00 90.15	A	C
ATOM	3735	OD1	ASP	652	78.257	-30.988	3.770	1.00 90.96	A	O
ATOM	3736	OD2	ASP	652	76.962	-32.456	2.780	1.00 90.46	A	O

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ATOM	3737	C	ASP	652	79.180	-34.401	6.445	1.00	87.61	A	C
ATOM	3738	O	ASP	652	78.519	-35.419	6.603	1.00	87.70	A	O
ATOM	3739	N	ALA	653	80.430	-34.279	6.877	1.00	87.68	A	N
ATOM	3740	CA	ALA	653	81.101	-35.367	7.572	1.00	87.79	A	C
ATOM	3741	CB	ALA	653	82.605	-35.160	7.546	1.00	87.92	A	C
ATOM	3742	C	ALA	653	80.593	-35.438	9.015	1.00	88.07	A	C
ATOM	3743	O	ALA	653	80.798	-36.434	9.703	1.00	88.27	A	O
ATOM	3744	N	LYS	654	79.938	-34.370	9.464	1.00	88.69	A	N
ATOM	3745	CA	LYS	654	79.382	-34.306	10.813	1.00	89.80	A	C
ATOM	3746	CB	LYS	654	79.597	-32.923	11.422	1.00	90.82	A	C
ATOM	3747	CG	LYS	654	81.056	-32.477	11.497	1.00	93.30	A	C
ATOM	3748	CD	LYS	654	81.739	-32.886	12.795	1.00	94.11	A	C
ATOM	3749	CE	LYS	654	83.058	-32.139	12.966	1.00	93.83	A	C
ATOM	3750	NZ	LYS	654	83.666	-32.382	14.300	1.00	94.73	A	N
ATOM	3751	C	LYS	654	77.893	-34.609	10.756	1.00	90.04	A	C
ATOM	3752	O	LYS	654	77.309	-35.045	11.745	1.00	89.95	A	O
ATOM	3753	N	LYS	655	77.280	-34.343	9.601	1.00	90.61	A	N
ATOM	3754	CA	LYS	655	75.857	-34.607	9.392	1.00	91.07	A	C
ATOM	3755	CB	LYS	655	75.391	-34.075	8.032	1.00	91.23	A	C
ATOM	3756	CG	LYS	655	75.190	-32.575	7.936	1.00	91.21	A	C
ATOM	3757	CD	LYS	655	74.856	-32.181	6.502	1.00	91.65	A	C
ATOM	3758	CE	LYS	655	74.753	-30.670	6.331	1.00	92.67	A	C
ATOM	3759	NZ	LYS	655	74.701	-30.257	4.892	1.00	92.74	A	N
ATOM	3760	C	LYS	655	75.622	-36.110	9.428	1.00	91.65	A	C
ATOM	3761	O	LYS	655	74.611	-36.573	9.951	1.00	91.35	A	O
ATOM	3762	N	GLU	656	76.568	-36.860	8.860	1.00	92.72	A	N
ATOM	3763	CA	GLU	656	76.505	-38.322	8.800	1.00	93.31	A	C
ATOM	3764	CB	GLU	656	77.683	-38.883	7.989	1.00	94.92	A	C
ATOM	3765	CG	GLU	656	77.779	-38.391	6.548	1.00	97.70	A	C
ATOM	3766	CD	GLU	656	76.593	-38.813	5.693	1.00	100.06	A	C
ATOM	3767	OE1	GLU	656	76.626	-39.942	5.156	1.00	101.19	A	O
ATOM	3768	OE2	GLU	656	75.635	-38.016	5.550	1.00	100.88	A	O
ATOM	3769	C	GLU	656	76.516	-38.939	10.192	1.00	92.65	A	C
ATOM	3770	O	GLU	656	75.837	-39.932	10.441	1.00	92.35	A	O
ATOM	3771	N	GLN	657	77.295	-38.343	11.088	1.00	92.01	A	N
ATOM	3772	CA	GLN	657	77.408	-38.818	12.459	1.00	92.20	A	C
ATOM	3773	CB	GLN	657	78.517	-38.058	13.181	1.00	91.61	A	C
ATOM	3774	CG	GLN	657	79.872	-38.158	12.502	1.00	91.39	A	C
ATOM	3775	CD	GLN	657	80.938	-37.309	13.173	1.00	91.24	A	C
ATOM	3776	OE1	GLN	657	80.817	-36.942	14.344	1.00	91.10	A	O
ATOM	3777	NE2	GLN	657	81.992	-36.992	12.430	1.00	90.62	A	N
ATOM	3778	C	GLN	657	76.090	-38.650	13.207	1.00	93.03	A	C
ATOM	3779	O	GLN	657	75.777	-39.426	14.110	1.00	93.06	A	O
ATOM	3780	N	LEU	658	75.329	-37.626	12.827	1.00	94.04	A	N
ATOM	3781	CA	LEU	658	74.035	-37.336	13.437	1.00	94.46	A	C
ATOM	3782	CB	LEU	658	73.712	-35.845	13.299	1.00	93.46	A	C
ATOM	3783	CG	LEU	658	72.405	-35.317	13.894	1.00	92.37	A	C
ATOM	3784	CD1	LEU	658	72.371	-35.568	15.382	1.00	91.88	A	C
ATOM	3785	CD2	LEU	658	72.275	-33.835	13.606	1.00	91.54	A	C
ATOM	3786	C	LEU	658	72.947	-38.182	12.777	1.00	95.40	A	C
ATOM	3787	O	LEU	658	72.074	-38.717	13.453	1.00	95.32	A	O
ATOM	3788	N	ALA	659	73.010	-38.306	11.456	1.00	96.94	A	N
ATOM	3789	CA	ALA	659	72.039	-39.106	10.716	1.00	99.00	A	C
ATOM	3790	CB	ALA	659	71.988	-38.666	9.265	1.00	99.35	A	C
ATOM	3791	C	ALA	659	72.405	-40.587	10.823	1.00	100.46	A	C
ATOM	3792	O	ALA	659	72.061	-41.402	9.961	1.00	100.97	A	O
ATOM	3793	N	ASP	660	73.165	-40.900	11.867	1.00	101.82	A	N
ATOM	3794	CA	ASP	660	73.596	-42.258	12.175	1.00	103.23	A	C
ATOM	3795	CB	ASP	660	75.092	-42.451	11.895	1.00	103.48	A	C
ATOM	3796	CG	ASP	660	75.360	-43.428	10.753	1.00	103.58	A	C
ATOM	3797	OD1	ASP	660	76.371	-43.242	10.039	1.00	102.98	A	O
ATOM	3798	OD2	ASP	660	74.573	-44.384	10.575	1.00	103.19	A	O
ATOM	3799	C	ASP	660	73.307	-42.455	13.657	1.00	103.84	A	C

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ATOM	3800	O	ASP	660	73.189	-43.576	14.132	1.00103.89	A	O
ATOM	3801	N	ALA	661	73.214	-41.343	14.382	1.00105.22	A	N
ATOM	3802	CA	ALA	661	72.904	-41.361	15.807	1.00106.17	A	C
ATOM	3803	CB	ALA	661	73.456	-40.117	16.486	1.00106.07	A	C
ATOM	3804	C	ALA	661	71.383	-41.405	15.922	1.00106.75	A	C
ATOM	3805	O	ALA	661	70.837	-42.065	16.804	1.00106.92	A	O
ATOM	3806	N	ARG	662	70.715	-40.691	15.015	1.00107.20	A	N
ATOM	3807	CA	ARG	662	69.258	-40.651	14.970	1.00107.42	A	C
ATOM	3808	CB	ARG	662	68.763	-39.559	14.018	1.00107.44	A	C
ATOM	3809	CG	ARG	662	68.835	-38.138	14.561	1.00107.70	A	C
ATOM	3810	CD	ARG	662	68.266	-37.159	13.545	1.00107.42	A	C
ATOM	3811	NE	ARG	662	68.267	-35.773	14.009	1.00107.19	A	N
ATOM	3812	CZ	ARG	662	68.681	-34.745	13.276	1.00107.43	A	C
ATOM	3813	NH1	ARG	662	69.133	-34.946	12.046	1.00107.84	A	N
ATOM	3814	NH2	ARG	662	68.611	-33.510	13.754	1.00107.19	A	N
ATOM	3815	C	ARG	662	68.743	-42.001	14.488	1.00107.70	A	C
ATOM	3816	O	ARG	662	67.753	-42.507	15.008	1.00107.89	A	O
ATOM	3817	N	ARG	663	69.415	-42.571	13.486	1.00107.91	A	N
ATOM	3818	CA	ARG	663	69.021	-43.872	12.948	1.00107.81	A	C
ATOM	3819	CB	ARG	663	69.773	-44.207	11.641	1.00106.05	A	C
ATOM	3820	CG	ARG	663	69.791	-43.101	10.556	1.00103.74	A	C
ATOM	3821	CD	ARG	663	68.411	-42.487	10.209	1.00100.49	A	C
ATOM	3822	NE	ARG	663	67.749	-43.077	9.040	1.00 96.22	A	N
ATOM	3823	CZ	ARG	663	67.856	-42.623	7.793	1.00 93.51	A	C
ATOM	3824	NH1	ARG	663	68.606	-41.568	7.518	1.00 92.61	A	N
ATOM	3825	NH2	ARG	663	67.181	-43.210	6.821	1.00 92.06	A	N
ATOM	3826	C	ARG	663	69.273	-44.950	14.011	1.00108.52	A	C
ATOM	3827	O	ARG	663	68.651	-46.011	13.992	1.00108.83	A	O
ATOM	3828	N	ASP	664	70.175	-44.652	14.944	1.00109.66	A	N
ATOM	3829	CA	ASP	664	70.510	-45.566	16.039	1.00110.71	A	C
ATOM	3830	CB	ASP	664	71.998	-45.453	16.410	1.00111.68	A	C
ATOM	3831	CG	ASP	664	72.927	-46.112	15.384	1.00112.55	A	C
ATOM	3832	OD1	ASP	664	72.491	-46.388	14.246	1.00112.74	A	O
ATOM	3833	OD2	ASP	664	74.109	-46.339	15.721	1.00112.76	A	O
ATOM	3834	C	ASP	664	69.648	-45.296	17.276	1.00110.88	A	C
ATOM	3835	O	ASP	664	69.798	-45.957	18.303	1.00110.87	A	O
ATOM	3836	N	LEU	665	68.757	-44.312	17.166	1.00111.31	A	N
ATOM	3837	CA	LEU	665	67.841	-43.944	18.250	1.00111.16	A	C
ATOM	3838	CB	LEU	665	67.708	-42.420	18.341	1.00111.33	A	C
ATOM	3839	CG	LEU	665	66.539	-41.820	19.133	1.00110.97	A	C
ATOM	3840	CD1	LEU	665	66.577	-42.326	20.564	1.00110.51	A	C
ATOM	3841	CD2	LEU	665	66.570	-40.302	19.060	1.00110.26	A	C
ATOM	3842	C	LEU	665	66.480	-44.567	17.967	1.00110.80	A	C
ATOM	3843	O	LEU	665	65.767	-44.941	18.893	1.00110.43	A	O
ATOM	3844	N	LYS	666	66.121	-44.641	16.685	1.00110.72	A	N
ATOM	3845	CA	LYS	666	64.847	-45.228	16.269	1.00110.93	A	C
ATOM	3846	CB	LYS	666	64.599	-44.990	14.764	1.00110.93	A	C
ATOM	3847	CG	LYS	666	63.257	-45.542	14.273	1.00110.93	A	C
ATOM	3848	CD	LYS	666	63.149	-45.475	12.761	1.00110.98	A	C
ATOM	3849	CE	LYS	666	61.795	-45.974	12.287	1.00111.12	A	C
ATOM	3850	NZ	LYS	666	61.659	-45.971	10.798	1.00111.12	A	N
ATOM	3851	C	LYS	666	64.868	-46.724	16.553	1.00111.10	A	C
ATOM	3852	O	LYS	666	63.888	-47.282	17.056	1.00110.91	A	O
ATOM	3853	N	SER	667	66.001	-47.348	16.225	1.00111.37	A	N
ATOM	3854	CA	SER	667	66.202	-48.769	16.469	1.00111.56	A	C
ATOM	3855	CB	SER	667	67.069	-49.384	15.373	1.00111.95	A	C
ATOM	3856	OG	SER	667	67.158	-50.786	15.558	1.00112.42	A	O
ATOM	3857	C	SER	667	66.831	-48.991	17.856	1.00111.34	A	C
ATOM	3858	O	SER	667	67.620	-49.905	18.071	1.00111.31	A	O
ATOM	3859	N	ALA	668	66.407	-48.149	18.789	1.00111.26	A	N
ATOM	3860	CA	ALA	668	66.839	-48.189	20.183	1.00111.80	A	C
ATOM	3861	CB	ALA	668	67.991	-47.223	20.413	1.00111.37	A	C
ATOM	3862	C	ALA	668	65.614	-47.763	20.986	1.00112.45	A	C

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ATOM	3863	O	ALA	668	65.703	-47.430	22.172	1.00111.97	A	O
ATOM	3864	N	LYS	669	64.482	-47.730	20.280	1.00113.84	A	N
ATOM	3865	CA	LYS	669	63.166	-47.376	20.802	1.00115.06	A	C
ATOM	3866	CB	LYS	669	62.762	-45.951	20.407	1.00115.18	A	C
ATOM	3867	CG	LYS	669	63.392	-44.870	21.246	1.00115.48	A	C
ATOM	3868	CD	LYS	669	63.027	-43.487	20.712	1.00115.71	A	C
ATOM	3869	CE	LYS	669	63.436	-42.407	21.706	1.00116.22	A	C
ATOM	3870	NZ	LYS	669	63.282	-41.044	21.125	1.00116.09	A	N
ATOM	3871	C	LYS	669	62.145	-48.353	20.228	1.00115.82	A	C
ATOM	3872	O	LYS	669	61.087	-48.542	20.822	1.00115.97	A	O
ATOM	3873	N	ALA	670	62.433	-48.902	19.043	1.00116.94	A	N
ATOM	3874	CA	ALA	670	61.558	-49.869	18.383	1.00118.06	A	C
ATOM	3875	CB	ALA	670	62.191	-50.366	17.098	1.00117.87	A	C
ATOM	3876	C	ALA	670	61.289	-51.028	19.328	1.00119.05	A	C
ATOM	3877	O	ALA	670	60.335	-50.986	20.097	1.00119.55	A	O
ATOM	3878	N	ASP	671	62.091	-52.078	19.253	1.00120.25	A	N
ATOM	3879	CA	ASP	671	61.878	-53.186	20.160	1.00121.28	A	C
ATOM	3880	CB	ASP	671	62.248	-54.507	19.507	1.00121.80	A	C
ATOM	3881	CG	ASP	671	61.053	-55.203	18.840	1.00122.02	A	C
ATOM	3882	OD1	ASP	671	61.031	-56.453	18.911	1.00122.19	A	O
ATOM	3883	OD2	ASP	671	60.220	-54.542	18.171	1.00121.67	A	O
ATOM	3884	C	ASP	671	62.654	-52.983	21.452	1.00121.35	A	C
ATOM	3885	O	ASP	671	63.172	-53.930	22.059	1.00121.54	A	O
ATOM	3886	N	ALA	672	62.749	-51.716	21.838	1.00121.16	A	N
ATOM	3887	CA	ALA	672	63.384	-51.280	23.066	1.00120.97	A	C
ATOM	3888	CB	ALA	672	63.883	-49.880	22.892	1.00121.05	A	C
ATOM	3889	C	ALA	672	62.295	-51.322	24.138	1.00120.82	A	C
ATOM	3890	O	ALA	672	62.459	-50.822	25.255	1.00120.91	A	O
ATOM	3891	N	LYS	673	61.159	-51.888	23.734	1.00120.56	A	N
ATOM	3892	CA	LYS	673	59.973	-52.096	24.564	1.00120.37	A	C
ATOM	3893	CB	LYS	673	58.701	-51.845	23.736	1.00119.48	A	C
ATOM	3894	CG	LYS	673	58.719	-50.604	22.826	1.00118.15	A	C
ATOM	3895	CD	LYS	673	58.767	-49.277	23.589	1.00117.33	A	C
ATOM	3896	CE	LYS	673	58.565	-48.102	22.628	1.00116.46	A	C
ATOM	3897	NZ	LYS	673	58.735	-46.772	23.260	1.00115.62	A	N
ATOM	3898	C	LYS	673	60.020	-53.572	24.997	1.00120.80	A	C
ATOM	3899	O	LYS	673	59.335	-53.978	25.945	1.00120.71	A	O
ATOM	3900	N	VAL	674	60.803	-54.375	24.264	1.00121.13	A	N
ATOM	3901	CA	VAL	674	60.987	-55.804	24.553	1.00121.22	A	C
ATOM	3902	CB	VAL	674	60.793	-56.675	23.302	1.00120.84	A	C
ATOM	3903	CG1	VAL	674	59.405	-56.461	22.749	1.00120.55	A	C
ATOM	3904	CG2	VAL	674	61.817	-56.364	22.257	1.00120.26	A	C
ATOM	3905	C	VAL	674	62.336	-56.015	25.256	1.00121.72	A	C
ATOM	3906	O	VAL	674	63.097	-56.955	25.006	1.00121.65	A	O
ATOM	3907	N	MET	675	62.587	-55.045	26.123	1.00122.35	A	N
ATOM	3908	CA	MET	675	63.708	-54.882	27.047	1.00123.05	A	C
ATOM	3909	CB	MET	675	64.804	-53.991	26.432	1.00123.70	A	C
ATOM	3910	CG	MET	675	65.729	-54.684	25.451	1.00124.66	A	C
ATOM	3911	SD	MET	675	67.236	-53.721	25.160	1.00125.95	A	S
ATOM	3912	CE	MET	675	66.694	-52.587	23.822	1.00125.91	A	C
ATOM	3913	C	MET	675	62.948	-54.089	28.118	1.00123.29	A	C
ATOM	3914	O	MET	675	63.340	-53.998	29.283	1.00123.43	A	O
ATOM	3915	N	LYS	676	61.793	-53.593	27.664	1.00123.28	A	N
ATOM	3916	CA	LYS	676	60.775	-52.797	28.355	1.00123.25	A	C
ATOM	3917	CB	LYS	676	60.067	-53.588	29.456	1.00122.54	A	C
ATOM	3918	CG	LYS	676	60.867	-53.882	30.700	1.00121.73	A	C
ATOM	3919	CD	LYS	676	60.207	-55.007	31.473	1.00121.02	A	C
ATOM	3920	CE	LYS	676	61.103	-55.501	32.586	1.00120.37	A	C
ATOM	3921	NZ	LYS	676	60.853	-56.960	32.806	1.00120.01	A	N
ATOM	3922	C	LYS	676	60.947	-51.351	28.767	1.00123.73	A	C
ATOM	3923	O	LYS	676	62.054	-50.826	28.922	1.00123.73	A	O
ATOM	3924	N	ASP	677	59.786	-50.708	28.871	1.00124.19	A	N
ATOM	3925	CA	ASP	677	59.578	-49.317	29.253	1.00123.96	A	C

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ATOM	3926	CB	ASP	677	58.113	-48.951	28.972	1.00124.56	A	C
ATOM	3927	CG	ASP	677	57.608	-49.531	27.647	1.00125.39	A	C
ATOM	3928	OD1	ASP	677	58.340	-49.406	26.628	1.00125.92	A	O
ATOM	3929	OD2	ASP	677	56.495	-50.116	27.628	1.00125.78	A	O
ATOM	3930	C	ASP	677	59.870	-49.219	30.741	1.00123.43	A	C
ATOM	3931	O	ASP	677	59.310	-49.988	31.520	1.00123.07	A	O
ATOM	3932	N	ALA	678	60.769	-48.302	31.107	1.00122.70	A	N
ATOM	3933	CA	ALA	678	61.222	-48.075	32.485	1.00121.66	A	C
ATOM	3934	CB	ALA	678	60.182	-48.550	33.528	1.00121.44	A	C
ATOM	3935	C	ALA	678	62.559	-48.791	32.704	1.00120.61	A	C
ATOM	3936	O	ALA	678	63.484	-48.231	33.307	1.00120.37	A	O
ATOM	3937	N	LYS	679	62.636	-50.058	32.299	1.00119.33	A	N
ATOM	3938	CA	LYS	679	63.867	-50.842	32.419	1.00118.14	A	C
ATOM	3939	CB	LYS	679	63.598	-52.233	33.002	1.00117.00	A	C
ATOM	3940	CG	LYS	679	64.855	-53.097	33.222	1.00115.35	A	C
ATOM	3941	CD	LYS	679	64.516	-54.476	33.737	1.00114.01	A	C
ATOM	3942	CE	LYS	679	65.770	-55.299	33.925	1.00113.01	A	C
ATOM	3943	NZ	LYS	679	65.443	-56.685	34.369	1.00111.88	A	N
ATOM	3944	C	LYS	679	64.448	-50.968	31.015	1.00118.06	A	C
ATOM	3945	O	LYS	679	63.913	-51.712	30.194	1.00117.90	A	O
ATOM	3946	N	THR	680	65.513	-50.203	30.751	1.00117.89	A	N
ATOM	3947	CA	THR	680	66.221	-50.126	29.463	1.00117.41	A	C
ATOM	3948	CB	THR	680	65.997	-51.377	28.545	1.00116.83	A	C
ATOM	3949	OG1	THR	680	66.766	-52.477	29.034	1.00116.74	A	O
ATOM	3950	CG2	THR	680	66.378	-51.084	27.097	1.00116.66	A	C
ATOM	3951	C	THR	680	65.831	-48.825	28.769	1.00117.60	A	C
ATOM	3952	O	THR	680	66.487	-48.404	27.822	1.00117.33	A	O
ATOM	3953	N	LYS	681	64.768	-48.173	29.242	1.00118.15	A	N
ATOM	3954	CA	LYS	681	64.381	-46.880	28.670	1.00118.58	A	C
ATOM	3955	CB	LYS	681	63.062	-46.369	29.264	1.00118.75	A	C
ATOM	3956	CG	LYS	681	61.933	-46.197	28.224	1.00119.40	A	C
ATOM	3957	CD	LYS	681	60.662	-45.641	28.857	1.00119.64	A	C
ATOM	3958	CE	LYS	681	59.527	-45.541	27.849	1.00119.75	A	C
ATOM	3959	NZ	LYS	681	58.273	-44.966	28.421	1.00119.18	A	N
ATOM	3960	C	LYS	681	65.538	-45.919	28.968	1.00118.63	A	C
ATOM	3961	O	LYS	681	65.705	-44.895	28.292	1.00118.66	A	O
ATOM	3962	N	LYS	682	66.365	-46.292	29.950	1.00118.69	A	N
ATOM	3963	CA	LYS	682	67.540	-45.512	30.304	1.00118.83	A	C
ATOM	3964	CB	LYS	682	67.948	-45.712	31.767	1.00117.75	A	C
ATOM	3965	CG	LYS	682	67.683	-44.458	32.608	1.00116.27	A	C
ATOM	3966	CD	LYS	682	68.529	-44.374	33.874	1.00114.89	A	C
ATOM	3967	CE	LYS	682	68.193	-45.456	34.885	1.00113.85	A	C
ATOM	3968	NZ	LYS	682	68.591	-46.822	34.457	1.00112.78	A	N
ATOM	3969	C	LYS	682	68.703	-45.813	29.357	1.00119.48	A	C
ATOM	3970	O	LYS	682	69.830	-45.398	29.612	1.00119.66	A	O
ATOM	3971	N	VAL	683	68.439	-46.614	28.320	1.00120.34	A	N
ATOM	3972	CA	VAL	683	69.440	-46.907	27.290	1.00120.95	A	C
ATOM	3973	CB	VAL	683	69.071	-48.170	26.444	1.00121.16	A	C
ATOM	3974	CG1	VAL	683	69.593	-48.055	25.012	1.00121.24	A	C
ATOM	3975	CG2	VAL	683	69.630	-49.433	27.108	1.00121.42	A	C
ATOM	3976	C	VAL	683	69.330	-45.651	26.414	1.00120.96	A	C
ATOM	3977	O	VAL	683	70.322	-45.134	25.900	1.00121.24	A	O
ATOM	3978	N	VAL	684	68.094	-45.158	26.314	1.00120.89	A	N
ATOM	3979	CA	VAL	684	67.798	-43.962	25.546	1.00120.95	A	C
ATOM	3980	CB	VAL	684	66.305	-43.886	25.123	1.00120.30	A	C
ATOM	3981	CG1	VAL	684	66.102	-42.798	24.069	1.00120.00	A	C
ATOM	3982	CG2	VAL	684	65.838	-45.236	24.610	1.00120.18	A	C
ATOM	3983	C	VAL	684	68.160	-42.737	26.393	1.00121.37	A	C
ATOM	3984	O	VAL	684	67.381	-41.801	26.538	1.00121.33	A	O
ATOM	3985	N	GLU	685	69.333	-42.800	27.012	1.00121.93	A	N
ATOM	3986	CA	GLU	685	69.828	-41.692	27.821	1.00122.50	A	C
ATOM	3987	CB	GLU	685	70.560	-42.198	29.073	1.00124.46	A	C
ATOM	3988	CG	GLU	685	70.965	-41.109	30.085	1.00126.65	A	C

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ATOM	3989	CD	GLU	685	69.766	-40.476	30.801	1.00128.04	A	C
ATOM	3990	OE1	GLU	685	69.295	-41.061	31.806	1.00128.34	A	O
ATOM	3991	OE2	GLU	685	69.308	-39.390	30.367	1.00128.88	A	O
ATOM	3992	C	GLU	685	70.789	-40.962	26.887	1.00121.69	A	C
ATOM	3993	O	GLU	685	70.877	-39.740	26.896	1.00121.48	A	O
ATOM	3994	N	SER	686	71.516	-41.747	26.091	1.00120.82	A	N
ATOM	3995	CA	SER	686	72.474	-41.212	25.123	1.00119.87	A	C
ATOM	3996	CB	SER	686	73.698	-42.120	25.026	1.00119.56	A	C
ATOM	3997	OG	SER	686	73.350	-43.427	24.594	1.00118.93	A	O
ATOM	3998	C	SER	686	71.807	-41.087	23.756	1.00119.30	A	C
ATOM	3999	O	SER	686	71.941	-40.073	23.071	1.00119.48	A	O
ATOM	4000	N	LYS	687	71.084	-42.127	23.357	1.00118.42	A	N
ATOM	4001	CA	LYS	687	70.395	-42.133	22.069	1.00117.51	A	C
ATOM	4002	CB	LYS	687	69.641	-43.451	21.877	1.00117.32	A	C
ATOM	4003	CG	LYS	687	70.400	-44.700	22.304	1.00116.76	A	C
ATOM	4004	CD	LYS	687	71.170	-45.355	21.162	1.00116.34	A	C
ATOM	4005	CE	LYS	687	72.401	-44.570	20.770	1.00116.01	A	C
ATOM	4006	NZ	LYS	687	73.109	-45.247	19.643	1.00115.62	A	N
ATOM	4007	C	LYS	687	69.394	-40.976	22.042	1.00117.01	A	C
ATOM	4008	O	LYS	687	68.829	-40.641	20.997	1.00116.94	A	O
ATOM	4009	N	LYS	688	69.210	-40.345	23.197	1.00116.15	A	N
ATOM	4010	CA	LYS	688	68.282	-39.235	23.368	1.00114.95	A	C
ATOM	4011	CB	LYS	688	67.419	-39.532	24.597	1.00114.98	A	C
ATOM	4012	CG	LYS	688	66.151	-38.724	24.780	1.00114.40	A	C
ATOM	4013	CD	LYS	688	65.378	-39.304	25.956	1.00114.12	A	C
ATOM	4014	CE	LYS	688	64.214	-38.433	26.366	1.00114.15	A	C
ATOM	4015	NZ	LYS	688	63.608	-38.975	27.612	1.00114.36	A	N
ATOM	4016	C	LYS	688	69.046	-37.923	23.557	1.00113.83	A	C
ATOM	4017	O	LYS	688	68.765	-36.914	22.898	1.00113.70	A	O
ATOM	4018	N	LYS	689	70.049	-37.971	24.428	1.00112.68	A	N
ATOM	4019	CA	LYS	689	70.871	-36.813	24.770	1.00111.98	A	C
ATOM	4020	CB	LYS	689	71.205	-36.851	26.262	1.00112.21	A	C
ATOM	4021	CG	LYS	689	71.848	-35.602	26.859	1.00112.19	A	C
ATOM	4022	CD	LYS	689	72.233	-35.887	28.303	1.00111.88	A	C
ATOM	4023	CE	LYS	689	71.055	-36.484	29.063	1.00111.59	A	C
ATOM	4024	NZ	LYS	689	71.478	-37.094	30.351	1.00111.53	A	N
ATOM	4025	C	LYS	689	72.152	-36.690	23.958	1.00111.23	A	C
ATOM	4026	O	LYS	689	72.555	-35.578	23.608	1.00111.40	A	O
ATOM	4027	N	ALA	690	72.834	-37.809	23.720	1.00110.17	A	N
ATOM	4028	CA	ALA	690	74.063	-37.795	22.928	1.00109.40	A	C
ATOM	4029	CB	ALA	690	74.752	-39.136	22.980	1.00109.65	A	C
ATOM	4030	C	ALA	690	73.725	-37.421	21.489	1.00108.97	A	C
ATOM	4031	O	ALA	690	74.585	-36.975	20.738	1.00108.81	A	O
ATOM	4032	N	VAL	691	72.470	-37.647	21.109	1.00108.72	A	N
ATOM	4033	CA	VAL	691	71.978	-37.298	19.782	1.00108.37	A	C
ATOM	4034	CB	VAL	691	70.616	-37.978	19.485	1.00108.05	A	C
ATOM	4035	CG1	VAL	691	69.918	-37.304	18.318	1.00107.59	A	C
ATOM	4036	CG2	VAL	691	70.824	-39.456	19.178	1.00108.90	A	C
ATOM	4037	C	VAL	691	71.804	-35.778	19.755	1.00108.10	A	C
ATOM	4038	O	VAL	691	71.874	-35.149	18.706	1.00108.04	A	O
ATOM	4039	N	GLN	692	71.593	-35.209	20.937	1.00108.10	A	N
ATOM	4040	CA	GLN	692	71.426	-33.775	21.088	1.00107.84	A	C
ATOM	4041	CB	GLN	692	70.771	-33.470	22.427	1.00108.91	A	C
ATOM	4042	CG	GLN	692	69.874	-32.256	22.418	1.00110.26	A	C
ATOM	4043	CD	GLN	692	68.931	-32.226	23.605	1.00110.93	A	C
ATOM	4044	OE1	GLN	692	68.763	-33.230	24.307	1.00110.97	A	O
ATOM	4045	NE2	GLN	692	68.298	-31.082	23.828	1.00110.86	A	N
ATOM	4046	C	GLN	692	72.789	-33.103	21.004	1.00106.84	A	C
ATOM	4047	O	GLN	692	72.931	-32.090	20.333	1.00107.18	A	O
ATOM	4048	N	ARG	693	73.790	-33.707	21.646	1.00105.45	A	N
ATOM	4049	CA	ARG	693	75.167	-33.194	21.651	1.00104.11	A	C
ATOM	4050	CB	ARG	693	76.078	-34.160	22.426	1.00105.93	A	C
ATOM	4051	CG	ARG	693	77.547	-33.715	22.575	1.00108.37	A	C



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ATOM	4052	CD	ARG	693	78.465	-34.353	21.525	1.00110.61	A	C
ATOM	4053	NE	ARG	693	78.453	-35.818	21.587	1.00113.15	A	N
ATOM	4054	CZ	ARG	693	79.204	-36.621	20.830	1.00113.85	A	C
ATOM	4055	NH1	ARG	693	80.050	-36.113	19.936	1.00114.24	A	N
ATOM	4056	NH2	ARG	693	79.094	-37.941	20.948	1.00113.82	A	N
ATOM	4057	C	ARG	693	75.715	-32.971	20.232	1.00102.13	A	C
ATOM	4058	O	ARG	693	76.525	-32.071	20.012	1.00101.78	A	O
ATOM	4059	N	LEU	694	75.263	-33.793	19.284	1.00 99.78	A	N
ATOM	4060	CA	LEU	694	75.689	-33.687	17.883	1.00 97.11	A	C
ATOM	4061	CB	LEU	694	75.509	-35.030	17.174	1.00 96.91	A	C
ATOM	4062	CG	LEU	694	76.463	-36.160	17.542	1.00 96.04	A	C
ATOM	4063	CD1	LEU	694	75.986	-37.452	16.908	1.00 96.23	A	C
ATOM	4064	CD2	LEU	694	77.870	-35.823	17.079	1.00 96.26	A	C
ATOM	4065	C	LEU	694	74.973	-32.589	17.095	1.00 95.66	A	C
ATOM	4066	O	LEU	694	75.556	-32.005	16.182	1.00 94.93	A	O
ATOM	4067	N	GLU	695	73.710	-32.325	17.431	1.00 94.12	A	N
ATOM	4068	CA	GLU	695	72.917	-31.292	16.761	1.00 92.74	A	C
ATOM	4069	CB	GLU	695	71.471	-31.315	17.266	1.00 92.99	A	C
ATOM	4070	CG	GLU	695	70.742	-32.625	17.024	1.00 94.77	A	C
ATOM	4071	CD	GLU	695	69.319	-32.629	17.575	1.00 95.53	A	C
ATOM	4072	OE1	GLU	695	69.120	-32.258	18.757	1.00 95.38	A	O
ATOM	4073	OE2	GLU	695	68.399	-33.025	16.827	1.00 95.70	A	O
ATOM	4074	C	GLU	695	73.502	-29.896	16.979	1.00 91.47	A	C
ATOM	4075	O	GLU	695	73.610	-29.107	16.039	1.00 90.67	A	O
ATOM	4076	N	GLU	696	73.872	-29.601	18.224	1.00 90.42	A	N
ATOM	4077	CA	GLU	696	74.445	-28.309	18.593	1.00 89.36	A	C
ATOM	4078	CB	GLU	696	74.514	-28.152	20.118	1.00 89.96	A	C
ATOM	4079	CG	GLU	696	74.037	-29.355	20.939	1.00 91.34	A	C
ATOM	4080	CD	GLU	696	72.518	-29.406	21.118	1.00 92.32	A	C
ATOM	4081	OE1	GLU	696	72.044	-29.368	22.274	1.00 92.51	A	O
ATOM	4082	OE2	GLU	696	71.790	-29.511	20.108	1.00 92.86	A	O
ATOM	4083	C	GLU	696	75.838	-28.138	18.005	1.00 88.23	A	C
ATOM	4084	O	GLU	696	76.221	-27.044	17.583	1.00 88.38	A	O
ATOM	4085	N	GLN	697	76.589	-29.234	17.988	1.00 86.89	A	N
ATOM	4086	CA	GLN	697	77.944	-29.256	17.454	1.00 85.61	A	C
ATOM	4087	CB	GLN	697	78.588	-30.609	17.749	1.00 85.06	A	C
ATOM	4088	CG	GLN	697	80.044	-30.740	17.348	1.00 84.13	A	C
ATOM	4089	CD	GLN	697	80.587	-32.116	17.658	1.00 83.21	A	C
ATOM	4090	OE1	GLN	697	80.812	-32.457	18.818	1.00 81.98	A	O
ATOM	4091	NE2	GLN	697	80.779	-32.926	16.622	1.00 83.14	A	N
ATOM	4092	C	GLN	697	77.890	-29.012	15.953	1.00 85.22	A	C
ATOM	4093	O	GLN	697	78.861	-28.554	15.356	1.00 84.86	A	O
ATOM	4094	N	LEU	698	76.743	-29.335	15.355	1.00 85.60	A	N
ATOM	4095	CA	LEU	698	76.508	-29.146	13.924	1.00 85.51	A	C
ATOM	4096	CB	LEU	698	75.468	-30.150	13.406	1.00 84.52	A	C
ATOM	4097	CG	LEU	698	74.997	-30.026	11.951	1.00 83.22	A	C
ATOM	4098	CD1	LEU	698	76.133	-30.318	10.995	1.00 83.47	A	C
ATOM	4099	CD2	LEU	698	73.850	-30.974	11.704	1.00 82.79	A	C
ATOM	4100	C	LEU	698	76.009	-27.722	13.701	1.00 85.67	A	C
ATOM	4101	O	LEU	698	76.449	-27.041	12.775	1.00 85.74	A	O
ATOM	4102	N	MET	699	75.084	-27.282	14.554	1.00 85.61	A	N
ATOM	4103	CA	MET	699	74.536	-25.934	14.464	1.00 85.84	A	C
ATOM	4104	CB	MET	699	73.495	-25.696	15.564	1.00 87.27	A	C
ATOM	4105	CG	MET	699	72.135	-26.362	15.309	1.00 89.21	A	C
ATOM	4106	SD	MET	699	70.932	-26.084	16.660	1.00 90.52	A	S
ATOM	4107	CE	MET	699	70.261	-27.724	16.906	1.00 90.75	A	C
ATOM	4108	C	MET	699	75.666	-24.913	14.564	1.00 84.97	A	C
ATOM	4109	O	MET	699	75.611	-23.854	13.942	1.00 85.03	A	O
ATOM	4110	N	LYS	700	76.707	-25.267	15.315	1.00 83.57	A	N
ATOM	4111	CA	LYS	700	77.869	-24.408	15.486	1.00 82.29	A	C
ATOM	4112	CB	LYS	700	78.778	-24.956	16.593	1.00 82.00	A	C
ATOM	4113	CG	LYS	700	80.058	-24.156	16.793	1.00 81.73	A	C
ATOM	4114	CD	LYS	700	80.866	-24.630	17.989	1.00 80.46	A	C

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ATOM	4115	CE	LYS	700	82.056	-23.703	18.214	1.00	80.27	A	C
ATOM	4116	NZ	LYS	700	82.848	-24.047	19.425	1.00	79.56	A	N
ATOM	4117	C	LYS	700	78.653	-24.290	14.177	1.00	81.53	A	C
ATOM	4118	O	LYS	700	78.985	-23.191	13.741	1.00	82.23	A	O
ATOM	4119	N	LEU	701	78.927	-25.428	13.550	1.00	80.44	A	N
ATOM	4120	CA	LEU	701	79.676	-25.466	12.300	1.00	79.98	A	C
ATOM	4121	CB	LEU	701	79.858	-26.910	11.841	1.00	79.30	A	C
ATOM	4122	CG	LEU	701	80.717	-27.795	12.736	1.00	78.59	A	C
ATOM	4123	CD1	LEU	701	80.245	-29.218	12.634	1.00	78.48	A	C
ATOM	4124	CD2	LEU	701	82.177	-27.670	12.358	1.00	78.50	A	C
ATOM	4125	C	LEU	701	79.010	-24.667	11.193	1.00	80.43	A	C
ATOM	4126	O	LEU	701	79.680	-23.939	10.466	1.00	80.87	A	O
ATOM	4127	N	GLU	702	77.694	-24.813	11.062	1.00	80.80	A	N
ATOM	4128	CA	GLU	702	76.951	-24.101	10.030	1.00	80.92	A	C
ATOM	4129	CB	GLU	702	75.543	-24.668	9.874	1.00	81.74	A	C
ATOM	4130	CG	GLU	702	75.515	-26.068	9.292	1.00	82.99	A	C
ATOM	4131	CD	GLU	702	74.129	-26.491	8.854	1.00	84.26	A	C
ATOM	4132	OE1	GLU	702	73.192	-26.439	9.681	1.00	85.23	A	O
ATOM	4133	OE2	GLU	702	73.976	-26.877	7.676	1.00	84.75	A	O
ATOM	4134	C	GLU	702	76.894	-22.615	10.317	1.00	80.58	A	C
ATOM	4135	O	GLU	702	76.949	-21.802	9.397	1.00	81.07	A	O
ATOM	4136	N	VAL	703	76.781	-22.265	11.595	1.00	80.16	A	N
ATOM	4137	CA	VAL	703	76.746	-20.864	12.009	1.00	79.53	A	C
ATOM	4138	CB	VAL	703	76.469	-20.745	13.530	1.00	79.51	A	C
ATOM	4139	CG1	VAL	703	77.039	-19.453	14.088	1.00	79.81	A	C
ATOM	4140	CG2	VAL	703	74.974	-20.805	13.793	1.00	78.69	A	C
ATOM	4141	C	VAL	703	78.086	-20.220	11.660	1.00	78.87	A	C
ATOM	4142	O	VAL	703	78.150	-19.057	11.276	1.00	78.64	A	O
ATOM	4143	N	GLN	704	79.143	-21.015	11.760	1.00	78.81	A	N
ATOM	4144	CA	GLN	704	80.501	-20.582	11.462	1.00	79.46	A	C
ATOM	4145	CB	GLN	704	81.470	-21.593	12.081	1.00	80.12	A	C
ATOM	4146	CG	GLN	704	82.931	-21.211	12.092	1.00	81.29	A	C
ATOM	4147	CD	GLN	704	83.800	-22.360	12.577	1.00	82.24	A	C
ATOM	4148	OE1	GLN	704	83.546	-22.945	13.631	1.00	82.10	A	O
ATOM	4149	NE2	GLN	704	84.818	-22.703	11.794	1.00	82.47	A	N
ATOM	4150	C	GLN	704	80.697	-20.495	9.937	1.00	79.36	A	C
ATOM	4151	O	GLN	704	81.542	-19.736	9.448	1.00	78.91	A	O
ATOM	4152	N	ALA	705	79.900	-21.271	9.200	1.00	78.80	A	N
ATOM	4153	CA	ALA	705	79.951	-21.303	7.735	1.00	77.67	A	C
ATOM	4154	CB	ALA	705	79.361	-22.603	7.213	1.00	77.93	A	C
ATOM	4155	C	ALA	705	79.213	-20.113	7.132	1.00	76.62	A	C
ATOM	4156	O	ALA	705	79.715	-19.469	6.213	1.00	76.48	A	O
ATOM	4157	N	THR	706	78.008	-19.851	7.633	1.00	75.64	A	N
ATOM	4158	CA	THR	706	77.206	-18.721	7.172	1.00	75.22	A	C
ATOM	4159	CB	THR	706	75.829	-18.682	7.874	1.00	74.66	A	C
ATOM	4160	OG1	THR	706	75.089	-19.868	7.557	1.00	74.36	A	O
ATOM	4161	CG2	THR	706	75.033	-17.465	7.429	1.00	74.18	A	C
ATOM	4162	C	THR	706	77.981	-17.454	7.522	1.00	75.72	A	C
ATOM	4163	O	THR	706	78.163	-16.574	6.683	1.00	75.92	A	O
ATOM	4164	N	ASP	707	78.476	-17.412	8.759	1.00	76.08	A	N
ATOM	4165	CA	ASP	707	79.260	-16.297	9.291	1.00	75.82	A	C
ATOM	4166	CB	ASP	707	79.789	-16.668	10.686	1.00	77.21	A	C
ATOM	4167	CG	ASP	707	80.553	-15.538	11.361	1.00	77.98	A	C
ATOM	4168	OD1	ASP	707	79.971	-14.449	11.540	1.00	78.78	A	O
ATOM	4169	OD2	ASP	707	81.728	-15.748	11.739	1.00	78.29	A	O
ATOM	4170	C	ASP	707	80.424	-15.976	8.364	1.00	75.11	A	C
ATOM	4171	O	ASP	707	80.680	-14.819	8.054	1.00	74.82	A	O
ATOM	4172	N	ARG	708	81.105	-17.015	7.899	1.00	75.44	A	N
ATOM	4173	CA	ARG	708	82.247	-16.851	7.010	1.00	76.09	A	C
ATOM	4174	CB	ARG	708	83.067	-18.151	6.986	1.00	76.88	A	C
ATOM	4175	CG	ARG	708	84.529	-18.010	6.544	1.00	77.27	A	C
ATOM	4176	CD	ARG	708	85.442	-17.482	7.652	1.00	77.89	A	C
ATOM	4177	NE	ARG	708	85.178	-16.085	7.997	1.00	79.25	A	N

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ATOM	4178	CZ	ARG	708	86.121	-15.184	8.270	1.00	79.92	A	C
ATOM	4179	NH1	ARG	708	85.782	-13.935	8.576	1.00	79.79	A	N
ATOM	4180	NH2	ARG	708	87.404	-15.523	8.230	1.00	79.41	A	N
ATOM	4181	C	ARG	708	81.793	-16.460	5.592	1.00	75.79	A	C
ATOM	4182	O	ARG	708	82.411	-15.609	4.942	1.00	75.47	A	O
ATOM	4183	N	GLU	709	80.687	-17.052	5.141	1.00	75.27	A	N
ATOM	4184	CA	GLU	709	80.135	-16.793	3.808	1.00	74.27	A	C
ATOM	4185	CB	GLU	709	79.007	-17.787	3.516	1.00	75.44	A	C
ATOM	4186	CG	GLU	709	79.183	-18.621	2.244	1.00	77.17	A	C
ATOM	4187	CD	GLU	709	78.896	-17.845	0.966	1.00	78.19	A	C
ATOM	4188	OE1	GLU	709	77.755	-17.350	0.807	1.00	78.80	A	O
ATOM	4189	OE2	GLU	709	79.809	-17.745	0.115	1.00	77.88	A	O
ATOM	4190	C	GLU	709	79.625	-15.363	3.616	1.00	72.90	A	C
ATOM	4191	O	GLU	709	79.396	-14.929	2.486	1.00	72.27	A	O
ATOM	4192	N	GLU	710	79.462	-14.635	4.719	1.00	71.83	A	N
ATOM	4193	CA	GLU	710	78.970	-13.261	4.679	1.00	71.13	A	C
ATOM	4194	CB	GLU	710	77.876	-13.064	5.728	1.00	70.34	A	C
ATOM	4195	CG	GLU	710	76.739	-14.066	5.565	1.00	70.07	A	C
ATOM	4196	CD	GLU	710	75.570	-13.847	6.511	1.00	69.61	A	C
ATOM	4197	OE1	GLU	710	74.419	-14.026	6.060	1.00	68.92	A	O
ATOM	4198	OE2	GLU	710	75.790	-13.527	7.700	1.00	69.84	A	O
ATOM	4199	C	GLU	710	80.065	-12.205	4.823	1.00	71.09	A	C
ATOM	4200	O	GLU	710	79.961	-11.119	4.258	1.00	71.07	A	O
ATOM	4201	N	ASN	711	81.109	-12.515	5.582	1.00	71.23	A	N
ATOM	4202	CA	ASN	711	82.214	-11.577	5.748	1.00	72.11	A	C
ATOM	4203	CB	ASN	711	82.911	-11.784	7.094	1.00	71.56	A	C
ATOM	4204	CG	ASN	711	82.151	-11.164	8.244	1.00	71.80	A	C
ATOM	4205	OD1	ASN	711	82.015	-11.770	9.302	1.00	71.96	A	O
ATOM	4206	ND2	ASN	711	81.658	-9.943	8.047	1.00	71.44	A	N
ATOM	4207	C	ASN	711	83.199	-11.777	4.602	1.00	72.86	A	C
ATOM	4208	O	ASN	711	84.413	-11.884	4.808	1.00	74.25	A	O
ATOM	4209	N	LYS	712	82.656	-11.830	3.392	1.00	72.70	A	N
ATOM	4210	CA	LYS	712	83.446	-12.035	2.189	1.00	72.65	A	C
ATOM	4211	CB	LYS	712	82.586	-12.762	1.143	1.00	73.84	A	C
ATOM	4212	CG	LYS	712	83.237	-13.004	-0.212	1.00	75.79	A	C
ATOM	4213	CD	LYS	712	82.245	-13.658	-1.168	1.00	77.22	A	C
ATOM	4214	CE	LYS	712	82.778	-13.721	-2.593	1.00	77.84	A	C
ATOM	4215	NZ	LYS	712	84.001	-14.558	-2.704	1.00	78.72	A	N
ATOM	4216	C	LYS	712	83.992	-10.716	1.634	1.00	71.89	A	C
ATOM	4217	O	LYS	712	85.167	-10.637	1.268	1.00	72.18	A	O
ATOM	4218	N	GLN	713	83.150	-9.681	1.612	1.00	70.21	A	N
ATOM	4219	CA	GLN	713	83.535	-8.369	1.078	1.00	68.07	A	C
ATOM	4220	CB	GLN	713	82.740	-8.088	-0.199	1.00	68.12	A	C
ATOM	4221	CG	GLN	713	83.015	-9.064	-1.324	1.00	67.60	A	C
ATOM	4222	CD	GLN	713	81.912	-9.069	-2.357	1.00	68.44	A	C
ATOM	4223	OE1	GLN	713	81.329	-8.026	-2.664	1.00	68.55	A	O
ATOM	4224	NE2	GLN	713	81.607	-10.248	-2.894	1.00	67.41	A	N
ATOM	4225	C	GLN	713	83.347	-7.218	2.074	1.00	66.28	A	C
ATOM	4226	O	GLN	713	83.122	-6.066	1.691	1.00	65.38	A	O
ATOM	4227	N	ILE	714	83.430	-7.547	3.357	1.00	63.65	A	N
ATOM	4228	CA	ILE	714	83.275	-6.573	4.424	1.00	60.44	A	C
ATOM	4229	CB	ILE	714	82.007	-6.845	5.258	1.00	60.37	A	C
ATOM	4230	CG2	ILE	714	81.612	-5.602	6.009	1.00	60.74	A	C
ATOM	4231	CG1	ILE	714	80.849	-7.328	4.379	1.00	60.67	A	C
ATOM	4232	CD1	ILE	714	80.357	-6.313	3.367	1.00	61.98	A	C
ATOM	4233	C	ILE	714	84.455	-6.781	5.358	1.00	59.23	A	C
ATOM	4234	O	ILE	714	84.985	-7.890	5.457	1.00	59.61	A	O
ATOM	4235	N	ALA	715	84.867	-5.719	6.039	1.00	57.12	A	N
ATOM	4236	CA	ALA	715	85.972	-5.805	6.984	1.00	55.26	A	C
ATOM	4237	CB	ALA	715	87.170	-5.036	6.481	1.00	54.35	A	C
ATOM	4238	C	ALA	715	85.498	-5.253	8.317	1.00	54.72	A	C
ATOM	4239	O	ALA	715	85.336	-4.040	8.489	1.00	54.47	A	O
ATOM	4240	N	LEU	716	85.246	-6.169	9.246	1.00	54.14	A	N

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ATOM	4241	CA	LEU	716	84.772	-5.829	10.583	1.00	53.33	A	C
ATOM	4242	CB	LEU	716	84.284	-7.089	11.292	1.00	54.67	A	C
ATOM	4243	CG	LEU	716	83.316	-8.007	10.550	1.00	55.39	A	C
ATOM	4244	CD1	LEU	716	83.003	-9.199	11.441	1.00	54.91	A	C
ATOM	4245	CD2	LEU	716	82.045	-7.248	10.176	1.00	55.62	A	C
ATOM	4246	C	LEU	716	85.844	-5.168	11.447	1.00	52.32	A	C
ATOM	4247	O	LEU	716	85.520	-4.486	12.418	1.00	51.93	A	O
ATOM	4248	N	GLY	717	87.110	-5.370	11.077	1.00	51.20	A	N
ATOM	4249	CA	GLY	717	88.236	-4.819	11.819	1.00	49.75	A	C
ATOM	4250	C	GLY	717	88.229	-3.347	12.211	1.00	49.06	A	C
ATOM	4251	O	GLY	717	88.111	-3.031	13.400	1.00	48.97	A	O
ATOM	4252	N	THR	718	88.363	-2.456	11.225	1.00	47.57	A	N
ATOM	4253	CA	THR	718	88.393	-1.010	11.468	1.00	45.50	A	C
ATOM	4254	CB	THR	718	88.281	-0.173	10.150	1.00	46.23	A	C
ATOM	4255	OG1	THR	718	89.316	-0.543	9.235	1.00	46.81	A	O
ATOM	4256	CG2	THR	718	88.419	1.327	10.446	1.00	45.08	A	C
ATOM	4257	C	THR	718	87.273	-0.578	12.393	1.00	43.88	A	C
ATOM	4258	O	THR	718	87.521	0.061	13.411	1.00	44.69	A	O
ATOM	4259	N	SER	719	86.045	-0.941	12.043	1.00	42.12	A	N
ATOM	4260	CA	SER	719	84.890	-0.569	12.848	1.00	40.62	A	C
ATOM	4261	CB	SER	719	83.583	-0.971	12.141	1.00	40.53	A	C
ATOM	4262	OG	SER	719	83.654	-2.280	11.595	1.00	38.38	A	O
ATOM	4263	C	SER	719	84.954	-1.147	14.258	1.00	39.77	A	C
ATOM	4264	O	SER	719	84.915	-0.405	15.230	1.00	38.16	A	O
ATOM	4265	N	LYS	720	85.149	-2.460	14.353	1.00	39.56	A	N
ATOM	4266	CA	LYS	720	85.212	-3.172	15.633	1.00	39.40	A	C
ATOM	4267	CB	LYS	720	85.487	-4.663	15.394	1.00	40.71	A	C
ATOM	4268	CG	LYS	720	85.796	-5.462	16.655	1.00	42.26	A	C
ATOM	4269	CD	LYS	720	85.921	-6.948	16.380	1.00	43.88	A	C
ATOM	4270	CE	LYS	720	86.169	-7.704	17.675	1.00	44.26	A	C
ATOM	4271	NZ	LYS	720	86.106	-9.179	17.485	1.00	44.75	A	N
ATOM	4272	C	LYS	720	86.222	-2.633	16.636	1.00	38.42	A	C
ATOM	4273	O	LYS	720	86.061	-2.804	17.847	1.00	38.68	A	O
ATOM	4274	N	LEU	721	87.252	-1.970	16.133	1.00	37.22	A	N
ATOM	4275	CA	LEU	721	88.299	-1.442	16.988	1.00	35.27	A	C
ATOM	4276	CB	LEU	721	89.651	-1.957	16.494	1.00	33.07	A	C
ATOM	4277	CG	LEU	721	90.532	-2.817	17.404	1.00	31.54	A	C
ATOM	4278	CD1	LEU	721	89.710	-3.562	18.435	1.00	30.27	A	C
ATOM	4279	CD2	LEU	721	91.365	-3.763	16.539	1.00	30.25	A	C
ATOM	4280	C	LEU	721	88.316	0.076	17.102	1.00	35.13	A	C
ATOM	4281	O	LEU	721	88.630	0.604	18.165	1.00	36.47	A	O
ATOM	4282	N	SER	722	87.956	0.778	16.028	1.00	34.69	A	N
ATOM	4283	CA	SER	722	87.965	2.242	16.036	1.00	32.91	A	C
ATOM	4284	CB	SER	722	88.629	2.770	14.769	1.00	33.03	A	C
ATOM	4285	OG	SER	722	89.977	2.332	14.709	1.00	31.73	A	O
ATOM	4286	C	SER	722	86.617	2.919	16.294	1.00	31.71	A	C
ATOM	4287	O	SER	722	86.546	3.869	17.065	1.00	32.97	A	O
ATOM	4288	N	PTR	723	85.556	2.466	15.635	1.00	30.67	A	N
ATOM	4289	CA	PTR	723	84.213	3.026	15.870	1.00	29.69	A	C
ATOM	4290	CB	PTR	723	83.446	3.110	14.543	1.00	28.44	A	C
ATOM	4291	CG	PTR	723	84.247	3.852	13.500	1.00	29.32	A	C
ATOM	4292	CD1	PTR	723	85.040	3.167	12.577	1.00	30.64	A	C
ATOM	4293	CE1	PTR	723	85.921	3.855	11.713	1.00	31.45	A	C
ATOM	4294	CD2	PTR	723	84.332	5.240	13.528	1.00	30.50	A	C
ATOM	4295	CE2	PTR	723	85.194	5.931	12.684	1.00	30.94	A	C
ATOM	4296	CZ	PTR	723	85.999	5.242	11.783	1.00	31.78	A	C
ATOM	4297	OH	PTR	723	86.923	5.992	11.076	1.00	32.00	A	O
ATOM	4298	C	PTR	723	83.550	2.062	16.873	1.00	29.48	A	C
ATOM	4299	O	PTR	723	84.189	1.073	17.265	1.00	33.14	A	O
ATOM	4300	P	PTR	723	87.523	5.661	9.636	1.00	32.69	A	P
ATOM	4301	O1P	PTR	723	86.555	4.938	8.769	1.00	33.17	A	O
ATOM	4302	O2P	PTR	723	88.216	6.848	9.082	1.00	32.80	A	O
ATOM	4303	O3P	PTR	723	88.710	4.625	9.907	1.00	31.02	A	O

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ATOM	4304	N	LEU	724	82.344	2.355	17.362	1.00	25.31	A	N
ATOM	4305	CA	LEU	724	81.661	1.434	18.310	1.00	21.92	A	C
ATOM	4306	CB	LEU	724	81.640	-0.002	17.770	1.00	18.05	A	C
ATOM	4307	CG	LEU	724	81.184	-0.299	16.349	1.00	15.96	A	C
ATOM	4308	CD1	LEU	724	81.512	-1.742	16.014	1.00	15.53	A	C
ATOM	4309	CD2	LEU	724	79.710	-0.020	16.209	1.00	15.31	A	C
ATOM	4310	C	LEU	724	82.207	1.371	19.748	1.00	20.64	A	C
ATOM	4311	O	LEU	724	83.318	0.889	19.980	1.00	19.83	A	O
ATOM	4312	N	ASP	725	81.375	1.784	20.705	1.00	19.59	A	N
ATOM	4313	CA	ASP	725	81.714	1.797	22.126	1.00	17.94	A	C
ATOM	4314	CB	ASP	725	80.605	2.515	22.900	1.00	17.57	A	C
ATOM	4315	CG	ASP	725	80.965	2.785	24.357	1.00	17.66	A	C
ATOM	4316	OD1	ASP	725	81.740	2.028	24.964	1.00	17.07	A	O
ATOM	4317	OD2	ASP	725	80.433	3.761	24.915	1.00	17.46	A	O
ATOM	4318	C	ASP	725	81.829	0.355	22.603	1.00	17.22	A	C
ATOM	4319	O	ASP	725	80.913	-0.439	22.412	1.00	16.37	A	O
ATOM	4320	N	PRO	726	82.958	0.003	23.236	1.00	16.67	A	N
ATOM	4321	CD	PRO	726	84.116	0.866	23.508	1.00	16.38	A	C
ATOM	4322	CA	PRO	726	83.205	-1.348	23.743	1.00	17.75	A	C
ATOM	4323	CB	PRO	726	84.640	-1.257	24.240	1.00	16.48	A	C
ATOM	4324	CG	PRO	726	84.764	0.155	24.650	1.00	16.00	A	C
ATOM	4325	C	PRO	726	82.257	-1.789	24.846	1.00	18.92	A	C
ATOM	4326	O	PRO	726	82.071	-2.981	25.078	1.00	20.40	A	O
ATOM	4327	N	ARG	727	81.651	-0.829	25.523	1.00	19.06	A	N
ATOM	4328	CA	ARG	727	80.720	-1.152	26.587	1.00	20.79	A	C
ATOM	4329	CB	ARG	727	80.361	0.102	27.376	1.00	20.02	A	C
ATOM	4330	CG	ARG	727	81.518	0.740	28.098	1.00	17.16	A	C
ATOM	4331	CD	ARG	727	81.124	2.093	28.600	1.00	12.94	A	C
ATOM	4332	NE	ARG	727	81.362	3.146	27.620	1.00	8.04	A	N
ATOM	4333	CZ	ARG	727	81.257	4.443	27.894	1.00	8.93	A	C
ATOM	4334	NH1	ARG	727	80.903	4.839	29.114	1.00	5.50	A	N
ATOM	4335	NH2	ARG	727	81.542	5.346	26.963	1.00	8.20	A	N
ATOM	4336	C	ARG	727	79.464	-1.767	25.987	1.00	22.72	A	C
ATOM	4337	O	ARG	727	78.966	-2.768	26.489	1.00	25.08	A	O
ATOM	4338	N	ILE	728	78.960	-1.166	24.913	1.00	22.79	A	N
ATOM	4339	CA	ILE	728	77.777	-1.663	24.227	1.00	22.66	A	C
ATOM	4340	CB	ILE	728	77.652	-1.022	22.840	1.00	21.86	A	C
ATOM	4341	CG2	ILE	728	76.601	-1.713	22.022	1.00	21.65	A	C
ATOM	4342	CG1	ILE	728	77.323	0.458	22.979	1.00	22.35	A	C
ATOM	4343	CD1	ILE	728	77.335	1.186	21.677	1.00	22.00	A	C
ATOM	4344	C	ILE	728	77.897	-3.171	24.071	1.00	23.43	A	C
ATOM	4345	O	ILE	728	76.946	-3.907	24.315	1.00	25.08	A	O
ATOM	4346	N	THR	729	79.000	-3.632	23.725	1.00	23.97	A	N
ATOM	4347	CA	THR	729	79.322	-5.058	23.559	1.00	26.01	A	C
ATOM	4348	CB	THR	729	80.597	-5.323	22.719	1.00	27.70	A	C
ATOM	4349	OG1	THR	729	80.530	-4.570	21.504	1.00	30.62	A	O
ATOM	4350	CG2	THR	729	80.723	-6.794	22.370	1.00	26.03	A	C
ATOM	4351	C	THR	729	79.429	-5.754	24.920	1.00	26.20	A	C
ATOM	4352	O	THR	729	78.749	-6.743	25.161	1.00	26.19	A	O
ATOM	4353	N	VAL	730	80.260	-5.224	25.815	1.00	26.31	A	N
ATOM	4354	CA	VAL	730	80.433	-5.822	27.137	1.00	25.58	A	C
ATOM	4355	CB	VAL	730	81.416	-5.011	28.015	1.00	24.01	A	C
ATOM	4356	CG1	VAL	730	81.346	-5.462	29.456	1.00	24.97	A	C
ATOM	4357	CG2	VAL	730	82.821	-5.222	27.528	1.00	23.84	A	C
ATOM	4358	C	VAL	730	79.097	-5.982	27.848	1.00	26.17	A	C
ATOM	4359	O	VAL	730	78.877	-6.979	28.517	1.00	27.53	A	O
ATOM	4360	N	ALA	731	78.189	-5.030	27.658	1.00	27.29	A	N
ATOM	4361	CA	ALA	731	76.868	-5.094	28.286	1.00	28.46	A	C
ATOM	4362	CB	ALA	731	76.145	-3.775	28.135	1.00	27.88	A	C
ATOM	4363	C	ALA	731	76.035	-6.221	27.682	1.00	29.63	A	C
ATOM	4364	O	ALA	731	75.295	-6.905	28.388	1.00	29.80	A	O
ATOM	4365	N	TRP	732	76.160	-6.400	26.372	1.00	30.91	A	N
ATOM	4366	CA	TRP	732	75.445	-7.451	25.663	1.00	32.51	A	C

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ATOM	4367	CB	TRP	732	75.595	-7.245	24.152	1.00	30.32	A	C
ATOM	4368	CG	TRP	732	74.964	-8.294	23.275	1.00	28.09	A	C
ATOM	4369	CD2	TRP	732	75.582	-9.497	22.797	1.00	25.98	A	C
ATOM	4370	CE2	TRP	732	74.666	-10.120	21.921	1.00	24.99	A	C
ATOM	4371	CE3	TRP	732	76.824	-10.103	23.017	1.00	24.37	A	C
ATOM	4372	CD1	TRP	732	73.725	-8.247	22.697	1.00	27.30	A	C
ATOM	4373	NE1	TRP	732	73.541	-9.338	21.879	1.00	25.67	A	N
ATOM	4374	CZ2	TRP	732	74.955	-11.317	21.263	1.00	24.28	A	C
ATOM	4375	CZ3	TRP	732	77.111	-11.300	22.359	1.00	24.96	A	C
ATOM	4376	CH2	TRP	732	76.180	-11.890	21.493	1.00	24.29	A	C
ATOM	4377	C	TRP	732	75.976	-8.827	26.099	1.00	34.97	A	C
ATOM	4378	O	TRP	732	75.210	-9.767	26.263	1.00	37.15	A	O
ATOM	4379	N	CYS	733	77.280	-8.938	26.320	1.00	37.30	A	N
ATOM	4380	CA	CYS	733	77.861	-10.204	26.755	1.00	39.71	A	C
ATOM	4381	CB	CYS	733	79.381	-10.140	26.672	1.00	38.75	A	C
ATOM	4382	SG	CYS	733	79.993	-10.230	24.993	1.00	40.26	A	S
ATOM	4383	C	CYS	733	77.427	-10.581	28.175	1.00	41.72	A	C
ATOM	4384	O	CYS	733	77.261	-11.762	28.494	1.00	42.48	A	O
ATOM	4385	N	LYS	734	77.248	-9.572	29.022	1.00	43.24	A	N
ATOM	4386	CA	LYS	734	76.826	-9.794	30.398	1.00	44.82	A	C
ATOM	4387	CB	LYS	734	77.229	-8.607	31.275	1.00	44.21	A	C
ATOM	4388	CG	LYS	734	78.726	-8.452	31.441	1.00	44.73	A	C
ATOM	4389	CD	LYS	734	79.049	-7.363	32.446	1.00	46.48	A	C
ATOM	4390	CE	LYS	734	80.541	-7.263	32.684	1.00	47.56	A	C
ATOM	4391	NZ	LYS	734	81.120	-8.588	33.062	1.00	48.07	A	N
ATOM	4392	C	LYS	734	75.317	-10.046	30.495	1.00	46.65	A	C
ATOM	4393	O	LYS	734	74.773	-10.193	31.594	1.00	47.26	A	O
ATOM	4394	N	LYS	735	74.645	-10.085	29.343	1.00	47.65	A	N
ATOM	4395	CA	LYS	735	73.208	-10.332	29.282	1.00	47.86	A	C
ATOM	4396	CB	LYS	735	72.522	-9.335	28.363	1.00	48.37	A	C
ATOM	4397	CG	LYS	735	71.940	-8.144	29.072	1.00	51.43	A	C
ATOM	4398	CD	LYS	735	71.248	-7.214	28.083	1.00	54.29	A	C
ATOM	4399	CE	LYS	735	70.182	-7.946	27.277	1.00	55.05	A	C
ATOM	4400	NZ	LYS	735	69.644	-7.089	26.188	1.00	57.07	A	N
ATOM	4401	C	LYS	735	72.920	-11.722	28.771	1.00	47.98	A	C
ATOM	4402	O	LYS	735	72.162	-12.467	29.375	1.00	48.30	A	O
ATOM	4403	N	TRP	736	73.521	-12.059	27.640	1.00	49.05	A	N
ATOM	4404	CA	TRP	736	73.311	-13.361	27.029	1.00	51.20	A	C
ATOM	4405	CB	TRP	736	73.233	-13.209	25.516	1.00	53.74	A	C
ATOM	4406	CG	TRP	736	72.193	-12.212	25.133	1.00	57.62	A	C
ATOM	4407	CD2	TRP	736	70.810	-12.245	25.494	1.00	59.06	A	C
ATOM	4408	CE2	TRP	736	70.220	-11.057	25.003	1.00	59.83	A	C
ATOM	4409	CE3	TRP	736	70.012	-13.159	26.192	1.00	58.89	A	C
ATOM	4410	CD1	TRP	736	72.381	-11.046	24.448	1.00	58.81	A	C
ATOM	4411	NE1	TRP	736	71.201	-10.343	24.369	1.00	59.83	A	N
ATOM	4412	CZ2	TRP	736	68.869	-10.761	25.188	1.00	59.81	A	C
ATOM	4413	CZ3	TRP	736	68.674	-12.863	26.377	1.00	60.31	A	C
ATOM	4414	CH2	TRP	736	68.114	-11.672	25.876	1.00	60.39	A	C
ATOM	4415	C	TRP	736	74.352	-14.391	27.439	1.00	51.37	A	C
ATOM	4416	O	TRP	736	74.474	-15.453	26.825	1.00	51.86	A	O
ATOM	4417	N	GLY	737	75.083	-14.069	28.499	1.00	51.14	A	N
ATOM	4418	CA	GLY	737	76.091	-14.969	29.014	1.00	51.28	A	C
ATOM	4419	C	GLY	737	77.157	-15.414	28.039	1.00	51.52	A	C
ATOM	4420	O	GLY	737	77.732	-16.481	28.226	1.00	52.72	A	O
ATOM	4421	N	VAL	738	77.410	-14.628	26.995	1.00	51.61	A	N
ATOM	4422	CA	VAL	738	78.443	-14.979	26.022	1.00	52.11	A	C
ATOM	4423	CB	VAL	738	78.143	-14.400	24.626	1.00	52.50	A	C
ATOM	4424	CG1	VAL	738	79.319	-14.634	23.692	1.00	52.31	A	C
ATOM	4425	CG2	VAL	738	76.899	-15.049	24.052	1.00	52.45	A	C
ATOM	4426	C	VAL	738	79.797	-14.468	26.507	1.00	52.27	A	C
ATOM	4427	O	VAL	738	79.991	-13.269	26.694	1.00	52.63	A	O
ATOM	4428	N	PRO	739	80.756	-15.379	26.714	1.00	52.36	A	N
ATOM	4429	CD	PRO	739	80.689	-16.824	26.436	1.00	52.60	A	C

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ATOM	4430	CA	PRO	739	82.092	-15.001	27.183	1.00	52.67	A	C
ATOM	4431	CB	PRO	739	82.815	-16.348	27.263	1.00	52.36	A	C
ATOM	4432	CG	PRO	739	82.138	-17.164	26.206	1.00	52.94	A	C
ATOM	4433	C	PRO	739	82.813	-14.011	26.263	1.00	52.67	A	C
ATOM	4434	O	PRO	739	82.887	-14.214	25.049	1.00	52.61	A	O
ATOM	4435	N	ILE	740	83.342	-12.945	26.861	1.00	52.18	A	N
ATOM	4436	CA	ILE	740	84.060	-11.903	26.132	1.00	52.25	A	C
ATOM	4437	CB	ILE	740	84.681	-10.831	27.073	1.00	53.55	A	C
ATOM	4438	CG2	ILE	740	83.719	-9.675	27.276	1.00	53.65	A	C
ATOM	4439	CG1	ILE	740	85.152	-11.457	28.394	1.00	56.12	A	C
ATOM	4440	CD1	ILE	740	84.038	-11.808	29.398	1.00	56.29	A	C
ATOM	4441	C	ILE	740	85.157	-12.425	25.219	1.00	51.29	A	C
ATOM	4442	O	ILE	740	85.484	-11.781	24.226	1.00	52.70	A	O
ATOM	4443	N	GLU	741	85.729	-13.577	25.552	1.00	50.20	A	N
ATOM	4444	CA	GLU	741	86.786	-14.162	24.733	1.00	49.64	A	C
ATOM	4445	CB	GLU	741	87.578	-15.211	25.518	1.00	50.99	A	C
ATOM	4446	CG	GLU	741	86.729	-16.213	26.303	1.00	53.12	A	C
ATOM	4447	CD	GLU	741	86.388	-15.749	27.720	1.00	54.28	A	C
ATOM	4448	OE1	GLU	741	86.229	-14.528	27.954	1.00	54.01	A	O
ATOM	4449	OE2	GLU	741	86.277	-16.623	28.608	1.00	54.46	A	O
ATOM	4450	C	GLU	741	86.247	-14.755	23.433	1.00	48.85	A	C
ATOM	4451	O	GLU	741	87.005	-14.990	22.495	1.00	48.57	A	O
ATOM	4452	N	LYS	742	84.942	-15.005	23.384	1.00	47.77	A	N
ATOM	4453	CA	LYS	742	84.315	-15.537	22.179	1.00	47.81	A	C
ATOM	4454	CB	LYS	742	83.051	-16.331	22.530	1.00	50.50	A	C
ATOM	4455	CG	LYS	742	83.298	-17.821	22.797	1.00	53.35	A	C
ATOM	4456	CD	LYS	742	83.749	-18.532	21.519	1.00	56.07	A	C
ATOM	4457	CE	LYS	742	84.077	-20.003	21.757	1.00	58.06	A	C
ATOM	4458	NZ	LYS	742	84.514	-20.697	20.499	1.00	59.00	A	N
ATOM	4459	C	LYS	742	83.996	-14.411	21.186	1.00	46.47	A	C
ATOM	4460	O	LYS	742	83.418	-14.654	20.129	1.00	46.20	A	O
ATOM	4461	N	ILE	743	84.403	-13.188	21.541	1.00	44.56	A	N
ATOM	4462	CA	ILE	743	84.211	-11.981	20.728	1.00	41.56	A	C
ATOM	4463	CB	ILE	743	83.138	-11.061	21.334	1.00	40.43	A	C
ATOM	4464	CG2	ILE	743	83.061	-9.754	20.562	1.00	41.03	A	C
ATOM	4465	CG1	ILE	743	81.787	-11.755	21.274	1.00	38.13	A	C
ATOM	4466	CD1	ILE	743	81.423	-12.205	19.880	1.00	37.64	A	C
ATOM	4467	C	ILE	743	85.522	-11.195	20.551	1.00	40.34	A	C
ATOM	4468	O	ILE	743	86.008	-11.037	19.431	1.00	39.78	A	O
ATOM	4469	N	TYR	744	86.061	-10.659	21.643	1.00	39.34	A	N
ATOM	4470	CA	TYR	744	87.326	-9.930	21.582	1.00	39.17	A	C
ATOM	4471	CB	TYR	744	87.401	-8.826	22.637	1.00	39.49	A	C
ATOM	4472	CG	TYR	744	86.396	-7.718	22.510	1.00	40.67	A	C
ATOM	4473	CD1	TYR	744	86.390	-6.867	21.411	1.00	40.98	A	C
ATOM	4474	CE1	TYR	744	85.500	-5.800	21.341	1.00	41.37	A	C
ATOM	4475	CD2	TYR	744	85.484	-7.481	23.529	1.00	41.47	A	C
ATOM	4476	CE2	TYR	744	84.596	-6.425	23.469	1.00	42.07	A	C
ATOM	4477	CZ	TYR	744	84.607	-5.584	22.381	1.00	41.79	A	C
ATOM	4478	OH	TYR	744	83.738	-4.515	22.370	1.00	42.10	A	O
ATOM	4479	C	TYR	744	88.461	-10.900	21.881	1.00	39.05	A	C
ATOM	4480	O	TYR	744	88.360	-11.712	22.800	1.00	39.08	A	O
ATOM	4481	N	ASN	745	89.543	-10.816	21.116	1.00	38.56	A	N
ATOM	4482	CA	ASN	745	90.683	-11.676	21.371	1.00	38.75	A	C
ATOM	4483	CB	ASN	745	91.562	-11.796	20.129	1.00	37.44	A	C
ATOM	4484	CG	ASN	745	92.125	-10.474	19.689	1.00	35.72	A	C
ATOM	4485	OD1	ASN	745	92.775	-9.780	20.464	1.00	35.50	A	O
ATOM	4486	ND2	ASN	745	91.887	-10.117	18.438	1.00	35.04	A	N
ATOM	4487	C	ASN	745	91.456	-11.052	22.534	1.00	39.75	A	C
ATOM	4488	O	ASN	745	90.951	-10.142	23.190	1.00	39.40	A	O
ATOM	4489	N	LYS	746	92.693	-11.494	22.744	1.00	41.45	A	N
ATOM	4490	CA	LYS	746	93.529	-11.001	23.838	1.00	42.15	A	C
ATOM	4491	CB	LYS	746	94.813	-11.821	23.922	1.00	44.48	A	C
ATOM	4492	CG	LYS	746	95.697	-11.518	25.120	1.00	45.44	A	C

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ATOM	4493	CD	LYS	746	96.963	-12.353	25.052	1.00	47.35	A	C
ATOM	4494	CE	LYS	746	97.847	-12.114	26.256	1.00	49.10	A	C
ATOM	4495	NZ	LYS	746	99.063	-12.973	26.235	1.00	49.92	A	N
ATOM	4496	C	LYS	746	93.869	-9.512	23.803	1.00	42.26	A	C
ATOM	4497	O	LYS	746	93.536	-8.780	24.738	1.00	42.84	A	O
ATOM	4498	N	THR	747	94.538	-9.060	22.745	1.00	41.15	A	N
ATOM	4499	CA	THR	747	94.909	-7.648	22.657	1.00	40.20	A	C
ATOM	4500	CB	THR	747	95.902	-7.366	21.513	1.00	40.36	A	C
ATOM	4501	OG1	THR	747	95.441	-7.969	20.297	1.00	40.46	A	O
ATOM	4502	CG2	THR	747	97.286	-7.901	21.876	1.00	42.14	A	C
ATOM	4503	C	THR	747	93.736	-6.673	22.586	1.00	39.43	A	C
ATOM	4504	O	THR	747	93.903	-5.474	22.824	1.00	40.48	A	O
ATOM	4505	N	GLN	748	92.549	-7.180	22.272	1.00	37.95	A	N
ATOM	4506	CA	GLN	748	91.372	-6.330	22.208	1.00	36.37	A	C
ATOM	4507	CB	GLN	748	90.328	-6.927	21.280	1.00	36.90	A	C
ATOM	4508	CG	GLN	748	90.834	-7.075	19.866	1.00	37.39	A	C
ATOM	4509	CD	GLN	748	89.740	-7.425	18.899	1.00	39.06	A	C
ATOM	4510	OE1	GLN	748	89.582	-6.769	17.873	1.00	39.99	A	O
ATOM	4511	NE2	GLN	748	88.972	-8.463	19.215	1.00	39.68	A	N
ATOM	4512	C	GLN	748	90.845	-6.185	23.619	1.00	35.34	A	C
ATOM	4513	O	GLN	748	90.550	-5.078	24.068	1.00	34.31	A	O
ATOM	4514	N	ARG	749	90.755	-7.309	24.324	1.00	34.60	A	N
ATOM	4515	CA	ARG	749	90.322	-7.308	25.716	1.00	34.20	A	C
ATOM	4516	CB	ARG	749	90.326	-8.722	26.282	1.00	34.12	A	C
ATOM	4517	CG	ARG	749	89.044	-9.485	26.043	1.00	34.59	A	C
ATOM	4518	CD	ARG	749	89.321	-10.933	25.720	1.00	34.42	A	C
ATOM	4519	NE	ARG	749	90.279	-11.532	26.637	1.00	34.10	A	N
ATOM	4520	CZ	ARG	749	91.106	-12.524	26.318	1.00	35.35	A	C
ATOM	4521	NH1	ARG	749	91.109	-13.044	25.092	1.00	35.00	A	N
ATOM	4522	NH2	ARG	749	91.921	-13.013	27.241	1.00	36.57	A	N
ATOM	4523	C	ARG	749	91.304	-6.447	26.497	1.00	34.19	A	C
ATOM	4524	O	ARG	749	90.957	-5.893	27.535	1.00	33.60	A	O
ATOM	4525	N	GLU	750	92.537	-6.369	25.992	1.00	34.87	A	N
ATOM	4526	CA	GLU	750	93.591	-5.555	26.592	1.00	35.57	A	C
ATOM	4527	CB	GLU	750	94.946	-5.858	25.960	1.00	36.49	A	C
ATOM	4528	CG	GLU	750	95.718	-7.010	26.573	1.00	40.72	A	C
ATOM	4529	CD	GLU	750	97.160	-7.088	26.056	1.00	44.04	A	C
ATOM	4530	OE1	GLU	750	97.765	-6.016	25.794	1.00	44.62	A	O
ATOM	4531	OE2	GLU	750	97.691	-8.217	25.917	1.00	43.32	A	O
ATOM	4532	C	GLU	750	93.263	-4.090	26.344	1.00	34.73	A	C
ATOM	4533	O	GLU	750	93.215	-3.285	27.271	1.00	35.46	A	O
ATOM	4534	N	LYS	751	93.035	-3.765	25.075	1.00	33.70	A	N
ATOM	4535	CA	LYS	751	92.707	-2.411	24.640	1.00	32.02	A	C
ATOM	4536	CB	LYS	751	92.506	-2.404	23.119	1.00	32.11	A	C
ATOM	4537	CG	LYS	751	92.094	-1.072	22.478	1.00	31.33	A	C
ATOM	4538	CD	LYS	751	91.879	-1.275	20.971	1.00	31.37	A	C
ATOM	4539	CE	LYS	751	92.088	-0.012	20.144	1.00	29.51	A	C
ATOM	4540	NZ	LYS	751	91.079	1.031	20.452	1.00	32.40	A	N
ATOM	4541	C	LYS	751	91.441	-1.913	25.321	1.00	31.20	A	C
ATOM	4542	O	LYS	751	91.360	-0.745	25.697	1.00	31.89	A	O
ATOM	4543	N	PHE	752	90.487	-2.823	25.528	1.00	29.89	A	N
ATOM	4544	CA	PHE	752	89.192	-2.492	26.133	1.00	27.80	A	C
ATOM	4545	CB	PHE	752	88.066	-3.103	25.292	1.00	23.43	A	C
ATOM	4546	CG	PHE	752	88.028	-2.606	23.878	1.00	19.60	A	C
ATOM	4547	CD1	PHE	752	88.156	-1.236	23.603	1.00	17.50	A	C
ATOM	4548	CD2	PHE	752	87.893	-3.499	22.821	1.00	15.97	A	C
ATOM	4549	CE1	PHE	752	88.156	-0.765	22.299	1.00	15.78	A	C
ATOM	4550	CE2	PHE	752	87.891	-3.041	21.512	1.00	16.72	A	C
ATOM	4551	CZ	PHE	752	88.024	-1.661	21.249	1.00	16.54	A	C
ATOM	4552	C	PHE	752	88.967	-2.846	27.610	1.00	28.41	A	C
ATOM	4553	O	PHE	752	87.820	-2.953	28.051	1.00	27.87	A	O
ATOM	4554	N	ALA	753	90.046	-2.991	28.379	1.00	29.93	A	N
ATOM	4555	CA	ALA	753	89.933	-3.329	29.798	1.00	30.73	A	C



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ATOM	4556	CB	ALA	753	91.302	-3.335	30.455	1.00	32.06	A	C
ATOM	4557	C	ALA	753	89.006	-2.363	30.522	1.00	30.98	A	C
ATOM	4558	O	ALA	753	88.220	-2.767	31.377	1.00	31.88	A	O
ATOM	4559	N	TRP	754	89.068	-1.092	30.143	1.00	30.86	A	N
ATOM	4560	CA	TRP	754	88.220	-0.083	30.760	1.00	31.28	A	C
ATOM	4561	CB	TRP	754	88.605	1.327	30.293	1.00	30.53	A	C
ATOM	4562	CG	TRP	754	88.386	1.643	28.838	1.00	27.62	A	C
ATOM	4563	CD2	TRP	754	87.193	2.159	28.245	1.00	26.73	A	C
ATOM	4564	CE2	TRP	754	87.485	2.440	26.894	1.00	26.01	A	C
ATOM	4565	CE3	TRP	754	85.903	2.419	28.726	1.00	27.72	A	C
ATOM	4566	CD1	TRP	754	89.321	1.614	27.847	1.00	26.82	A	C
ATOM	4567	NE1	TRP	754	88.791	2.096	26.677	1.00	25.59	A	N
ATOM	4568	CZ2	TRP	754	86.539	2.973	26.020	1.00	26.06	A	C
ATOM	4569	CZ3	TRP	754	84.959	2.949	27.853	1.00	27.51	A	C
ATOM	4570	CH2	TRP	754	85.285	3.221	26.516	1.00	27.38	A	C
ATOM	4571	C	TRP	754	86.737	-0.339	30.528	1.00	32.11	A	C
ATOM	4572	O	TRP	754	85.903	0.087	31.322	1.00	33.40	A	O
ATOM	4573	N	ALA	755	86.411	-1.039	29.447	1.00	32.75	A	N
ATOM	4574	CA	ALA	755	85.022	-1.352	29.140	1.00	33.55	A	C
ATOM	4575	CB	ALA	755	84.847	-1.560	27.663	1.00	34.96	A	C
ATOM	4576	C	ALA	755	84.569	-2.590	29.893	1.00	33.45	A	C
ATOM	4577	O	ALA	755	83.473	-2.625	30.439	1.00	32.34	A	O
ATOM	4578	N	ILE	756	85.428	-3.601	29.910	1.00	34.55	A	N
ATOM	4579	CA	ILE	756	85.149	-4.864	30.588	1.00	36.85	A	C
ATOM	4580	CB	ILE	756	86.252	-5.882	30.256	1.00	34.51	A	C
ATOM	4581	CG2	ILE	756	86.022	-7.181	30.992	1.00	35.29	A	C
ATOM	4582	CG1	ILE	756	86.280	-6.125	28.748	1.00	32.22	A	C
ATOM	4583	CD1	ILE	756	87.352	-7.070	28.305	1.00	29.61	A	C
ATOM	4584	C	ILE	756	84.961	-4.723	32.117	1.00	39.97	A	C
ATOM	4585	O	ILE	756	84.173	-5.456	32.728	1.00	39.68	A	O
ATOM	4586	N	ASP	757	85.679	-3.782	32.730	1.00	43.07	A	N
ATOM	4587	CA	ASP	757	85.547	-3.548	34.168	1.00	45.24	A	C
ATOM	4588	CB	ASP	757	86.792	-2.875	34.739	1.00	44.82	A	C
ATOM	4589	CG	ASP	757	86.922	-3.083	36.228	1.00	45.39	A	C
ATOM	4590	OD1	ASP	757	86.577	-2.159	36.995	1.00	44.40	A	O
ATOM	4591	OD2	ASP	757	87.351	-4.189	36.629	1.00	46.39	A	O
ATOM	4592	C	ASP	757	84.303	-2.693	34.427	1.00	46.52	A	C
ATOM	4593	O	ASP	757	83.447	-3.076	35.221	1.00	47.42	A	O
ATOM	4594	N	MET	758	84.213	-1.531	33.773	1.00	48.19	A	N
ATOM	4595	CA	MET	758	83.033	-0.667	33.908	1.00	49.89	A	C
ATOM	4596	CB	MET	758	83.290	0.741	33.337	1.00	49.17	A	C
ATOM	4597	CG	MET	758	84.418	1.540	34.001	1.00	50.13	A	C
ATOM	4598	SD	MET	758	84.442	3.330	33.557	1.00	50.98	A	S
ATOM	4599	CE	MET	758	85.751	3.386	32.389	1.00	49.26	A	C
ATOM	4600	C	MET	758	81.953	-1.371	33.078	1.00	51.22	A	C
ATOM	4601	O	MET	758	82.164	-2.496	32.624	1.00	51.73	A	O
ATOM	4602	N	ALA	759	80.809	-0.727	32.871	1.00	52.84	A	N
ATOM	4603	CA	ALA	759	79.725	-1.322	32.081	1.00	54.09	A	C
ATOM	4604	CB	ALA	759	80.178	-1.577	30.652	1.00	53.27	A	C
ATOM	4605	C	ALA	759	79.165	-2.604	32.680	1.00	55.61	A	C
ATOM	4606	O	ALA	759	79.891	-3.423	33.245	1.00	55.89	A	O
ATOM	4607	N	ASP	760	77.860	-2.782	32.527	1.00	58.07	A	N
ATOM	4608	CA	ASP	760	77.178	-3.959	33.048	1.00	60.29	A	C
ATOM	4609	CB	ASP	760	76.737	-3.731	34.504	1.00	61.33	A	C
ATOM	4610	CG	ASP	760	76.113	-2.356	34.731	1.00	62.58	A	C
ATOM	4611	OD1	ASP	760	76.108	-1.892	35.894	1.00	62.21	A	O
ATOM	4612	OD2	ASP	760	75.629	-1.739	33.756	1.00	63.57	A	O
ATOM	4613	C	ASP	760	75.994	-4.343	32.170	1.00	60.77	A	C
ATOM	4614	O	ASP	760	75.629	-3.607	31.259	1.00	60.73	A	O
ATOM	4615	N	GLU	761	75.407	-5.500	32.460	1.00	62.14	A	N
ATOM	4616	CA	GLU	761	74.267	-6.036	31.715	1.00	63.33	A	C
ATOM	4617	CB	GLU	761	73.586	-7.165	32.514	1.00	66.36	A	C
ATOM	4618	CG	GLU	761	73.467	-6.938	34.037	1.00	70.55	A	C

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ATOM	4619	CD	GLU	761	74.706	-7.386	34.826	1.00	72.83	A	C
ATOM	4620	OE1	GLU	761	74.962	-8.608	34.902	1.00	74.32	A	O
ATOM	4621	OE2	GLU	761	75.415	-6.521	35.388	1.00	74.11	A	O
ATOM	4622	C	GLU	761	73.222	-5.016	31.255	1.00	61.91	A	C
ATOM	4623	O	GLU	761	72.597	-5.191	30.209	1.00	61.68	A	O
ATOM	4624	N	ASP	762	73.077	-3.928	32.001	1.00	60.00	A	N
ATOM	4625	CA	ASP	762	72.092	-2.918	31.656	1.00	57.81	A	C
ATOM	4626	CB	ASP	762	71.091	-2.763	32.814	1.00	60.90	A	C
ATOM	4627	CG	ASP	762	70.302	-4.056	33.093	1.00	63.36	A	C
ATOM	4628	OD1	ASP	762	69.096	-4.125	32.745	1.00	63.18	A	O
ATOM	4629	OD2	ASP	762	70.891	-5.005	33.663	1.00	63.93	A	O
ATOM	4630	C	ASP	762	72.670	-1.564	31.231	1.00	54.44	A	C
ATOM	4631	O	ASP	762	72.146	-0.516	31.596	1.00	54.42	A	O
ATOM	4632	N	TYR	763	73.724	-1.592	30.422	1.00	50.75	A	N
ATOM	4633	CA	TYR	763	74.357	-0.366	29.942	1.00	47.55	A	C
ATOM	4634	CB	TYR	763	75.860	-0.570	29.753	1.00	44.45	A	C
ATOM	4635	CG	TYR	763	76.555	0.583	29.062	1.00	41.01	A	C
ATOM	4636	CD1	TYR	763	76.799	1.779	29.736	1.00	39.24	A	C
ATOM	4637	CE1	TYR	763	77.419	2.850	29.100	1.00	36.66	A	C
ATOM	4638	CD2	TYR	763	76.952	0.486	27.726	1.00	38.81	A	C
ATOM	4639	CE2	TYR	763	77.567	1.554	27.082	1.00	36.58	A	C
ATOM	4640	CZ	TYR	763	77.796	2.729	27.776	1.00	35.84	A	C
ATOM	4641	OH	TYR	763	78.398	3.785	27.148	1.00	34.77	A	O
ATOM	4642	C	TYR	763	73.747	0.127	28.639	1.00	47.67	A	C
ATOM	4643	O	TYR	763	73.702	-0.594	27.639	1.00	46.10	A	O
ATOM	4644	N	GLU	764	73.328	1.387	28.646	1.00	49.08	A	N
ATOM	4645	CA	GLU	764	72.718	1.995	27.473	1.00	49.67	A	C
ATOM	4646	CB	GLU	764	71.330	2.539	27.816	1.00	52.67	A	C
ATOM	4647	CG	GLU	764	70.307	1.482	28.205	1.00	56.72	A	C
ATOM	4648	CD	GLU	764	69.033	2.086	28.780	1.00	59.46	A	C
ATOM	4649	OE1	GLU	764	68.355	2.857	28.062	1.00	60.22	A	O
ATOM	4650	OE2	GLU	764	68.713	1.791	29.955	1.00	60.88	A	O
ATOM	4651	C	GLU	764	73.577	3.122	26.946	1.00	47.84	A	C
ATOM	4652	O	GLU	764	73.903	4.056	27.674	1.00	47.66	A	O
ATOM	4653	N	PHE	765	73.937	3.028	25.674	1.00	46.70	A	N
ATOM	4654	CA	PHE	765	74.738	4.053	25.028	1.00	46.89	A	C
ATOM	4655	CB	PHE	765	74.997	3.651	23.568	1.00	45.86	A	C
ATOM	4656	CG	PHE	765	75.932	4.569	22.825	1.00	45.09	A	C
ATOM	4657	CD1	PHE	765	77.282	4.623	23.153	1.00	45.41	A	C
ATOM	4658	CD2	PHE	765	75.462	5.369	21.790	1.00	43.51	A	C
ATOM	4659	CE1	PHE	765	78.150	5.460	22.461	1.00	44.02	A	C
ATOM	4660	CE2	PHE	765	76.319	6.206	21.096	1.00	43.10	A	C
ATOM	4661	CZ	PHE	765	77.666	6.253	21.430	1.00	43.53	A	C
ATOM	4662	C	PHE	765	73.930	5.357	25.110	1.00	48.22	A	C
ATOM	4663	O	PHE	765	74.475	6.385	25.569	1.00	47.98	A	O
ATOM	4664	OXT	PHE	765	72.722	5.313	24.783	1.00	50.16	A	O
TER	4665		PHE	765						A	
ATOM	4666	O5'	ADE	1	89.331	33.036	11.466	1.00	72.13	ADNA	O
ATOM	4667	N9	ADE	1	93.495	34.686	10.353	1.00	62.36	ADNA	N
ATOM	4668	C4	ADE	1	94.833	34.595	10.036	1.00	59.13	ADNA	C
ATOM	4669	N3	ADE	1	95.380	34.508	8.808	1.00	57.57	ADNA	N
ATOM	4670	C2	ADE	1	96.710	34.465	8.886	1.00	57.11	ADNA	C
ATOM	4671	N1	ADE	1	97.498	34.501	9.970	1.00	57.31	ADNA	N
ATOM	4672	C6	ADE	1	96.917	34.589	11.190	1.00	57.42	ADNA	C
ATOM	4673	N6	ADE	1	97.703	34.640	12.273	1.00	55.34	ADNA	N
ATOM	4674	C5	ADE	1	95.509	34.630	11.244	1.00	57.61	ADNA	C
ATOM	4675	N7	ADE	1	94.615	34.705	12.306	1.00	57.66	ADNA	N
ATOM	4676	C8	ADE	1	93.439	34.729	11.728	1.00	59.79	ADNA	C
ATOM	4677	C2'	ADE	1	92.364	33.656	8.353	1.00	69.10	ADNA	C
ATOM	4678	C5'	ADE	1	89.776	32.661	10.164	1.00	70.69	ADNA	C
ATOM	4679	C4'	ADE	1	90.198	33.866	9.357	1.00	70.42	ADNA	C
ATOM	4680	O4'	ADE	1	91.162	34.631	10.124	1.00	68.88	ADNA	O
ATOM	4681	C1'	ADE	1	92.381	34.756	9.400	1.00	66.51	ADNA	C

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ATOM	4682	C3'	ADE	1	90.885	33.517	8.036	1.00	71.13	ADNA C
ATOM	4683	O3'	ADE	1	90.506	34.419	6.988	1.00	72.80	ADNA O
ATOM	4684	P	ADE	2	90.569	33.921	5.459	1.00	72.54	ADNA P
ATOM	4685	O1P	ADE	2	90.785	35.107	4.590	1.00	73.73	ADNA O
ATOM	4686	O2P	ADE	2	89.395	33.047	5.219	1.00	73.31	ADNA O
ATOM	4687	O5'	ADE	2	91.883	33.015	5.424	1.00	71.50	ADNA O
ATOM	4688	N9	ADE	2	94.971	31.321	8.354	1.00	50.41	ADNA N
ATOM	4689	C4	ADE	2	96.098	31.305	9.137	1.00	45.66	ADNA C
ATOM	4690	N3	ADE	2	97.375	31.228	8.728	1.00	42.55	ADNA N
ATOM	4691	C2	ADE	2	98.199	31.226	9.770	1.00	40.67	ADNA C
ATOM	4692	N1	ADE	2	97.915	31.294	11.076	1.00	39.38	ADNA N
ATOM	4693	C6	ADE	2	96.621	31.383	11.453	1.00	40.96	ADNA C
ATOM	4694	N6	ADE	2	96.331	31.477	12.754	1.00	38.43	ADNA N
ATOM	4695	C5	ADE	2	95.649	31.380	10.443	1.00	43.79	ADNA C
ATOM	4696	N7	ADE	2	94.264	31.440	10.484	1.00	45.34	ADNA N
ATOM	4697	C8	ADE	2	93.913	31.403	9.223	1.00	47.83	ADNA C
ATOM	4698	C2'	ADE	2	93.768	30.499	6.304	1.00	61.53	ADNA C
ATOM	4699	C5'	ADE	2	93.110	33.507	4.881	1.00	67.73	ADNA C
ATOM	4700	C4'	ADE	2	94.216	32.491	5.068	1.00	65.17	ADNA C
ATOM	4701	O4'	ADE	2	94.821	32.574	6.386	1.00	62.72	ADNA O
ATOM	4702	C1'	ADE	2	94.943	31.254	6.896	1.00	57.45	ADNA C
ATOM	4703	C3'	ADE	2	93.802	31.024	4.881	1.00	64.33	ADNA C
ATOM	4704	O3'	ADE	2	94.844	30.327	4.201	1.00	65.90	ADNA O
ATOM	4705	P	ADE	3	94.920	30.380	2.603	1.00	67.62	ADNA P
ATOM	4706	O1P	ADE	3	94.485	31.749	2.200	1.00	67.37	ADNA O
ATOM	4707	O2P	ADE	3	94.214	29.184	2.059	1.00	66.63	ADNA O
ATOM	4708	O5'	ADE	3	96.479	30.240	2.307	1.00	62.88	ADNA O
ATOM	4709	N9	ADE	3	97.898	28.246	6.399	1.00	27.65	ADNA N
ATOM	4710	C4	ADE	3	98.247	28.155	7.729	1.00	20.48	ADNA C
ATOM	4711	N3	ADE	3	99.489	28.099	8.252	1.00	16.37	ADNA N
ATOM	4712	C2	ADE	3	99.436	28.092	9.590	1.00	12.70	ADNA C
ATOM	4713	N1	ADE	3	98.361	28.122	10.400	1.00	9.88	ADNA N
ATOM	4714	C6	ADE	3	97.126	28.151	9.836	1.00	11.69	ADNA C
ATOM	4715	N6	ADE	3	96.050	28.146	10.630	1.00	4.73	ADNA N
ATOM	4716	C5	ADE	3	97.049	28.176	8.433	1.00	15.18	ADNA C
ATOM	4717	N7	ADE	3	95.971	28.231	7.566	1.00	17.26	ADNA N
ATOM	4718	C8	ADE	3	96.524	28.255	6.377	1.00	23.81	ADNA C
ATOM	4719	C2'	ADE	3	98.897	27.121	4.384	1.00	44.75	ADNA C
ATOM	4720	C5'	ADE	3	97.100	28.965	2.330	1.00	55.84	ADNA C
ATOM	4721	C4'	ADE	3	98.451	29.040	3.005	1.00	50.55	ADNA C
ATOM	4722	O4'	ADE	3	98.314	29.408	4.406	1.00	44.89	ADNA O
ATOM	4723	C1'	ADE	3	98.807	28.364	5.252	1.00	38.43	ADNA C
ATOM	4724	C3'	ADE	3	99.155	27.684	2.994	1.00	49.47	ADNA C
ATOM	4725	O3'	ADE	3	100.545	27.832	2.697	1.00	51.51	ADNA O
ATOM	4726	P	ADE	4	101.445	26.521	2.467	1.00	53.99	ADNA P
ATOM	4727	O1P	ADE	4	102.635	26.867	1.643	1.00	54.53	ADNA O
ATOM	4728	O2P	ADE	4	100.537	25.432	2.021	1.00	54.83	ADNA O
ATOM	4729	O5'	ADE	4	101.962	26.204	3.937	1.00	48.72	ADNA O
ATOM	4730	N9	ADE	4	100.434	25.107	7.953	1.00	16.43	ADNA N
ATOM	4731	C4	ADE	4	99.931	25.089	9.233	1.00	8.26	ADNA C
ATOM	4732	N3	ADE	4	100.617	25.228	10.375	1.00	6.96	ADNA N
ATOM	4733	C2	ADE	4	99.792	25.243	11.417	1.00	6.28	ADNA C
ATOM	4734	N1	ADE	4	98.460	25.133	11.446	1.00	2.98	ADNA N
ATOM	4735	C6	ADE	4	97.802	24.979	10.281	1.00	3.28	ADNA C
ATOM	4736	N6	ADE	4	96.467	24.863	10.316	1.00	1.00	ADNA N
ATOM	4737	C5	ADE	4	98.563	24.955	9.103	1.00	4.96	ADNA C
ATOM	4738	N7	ADE	4	98.207	24.836	7.771	1.00	9.54	ADNA N
ATOM	4739	C8	ADE	4	99.353	24.914	7.130	1.00	14.78	ADNA C
ATOM	4740	C2'	ADE	4	102.520	24.413	6.604	1.00	29.88	ADNA C
ATOM	4741	C5'	ADE	4	102.595	27.222	4.694	1.00	40.67	ADNA C
ATOM	4742	C4'	ADE	4	103.018	26.693	6.040	1.00	35.22	ADNA C
ATOM	4743	O4'	ADE	4	101.895	26.644	6.959	1.00	32.72	ADNA O
ATOM	4744	C1'	ADE	4	101.837	25.362	7.583	1.00	26.14	ADNA C

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ATOM	4745	C3'	ADE	4	103.623	25.290	6.012	1.00	33.17	ADNA C
ATOM	4746	O3'	ADE	4	104.810	25.311	6.813	1.00	33.68	ADNA O
ATOM	4747	P	ADE	5	105.833	24.071	6.780	1.00	32.56	ADNA P
ATOM	4748	O1P	ADE	5	107.213	24.612	6.680	1.00	33.26	ADNA O
ATOM	4749	O2P	ADE	5	105.350	23.095	5.771	1.00	29.61	ADNA O
ATOM	4750	O5'	ADE	5	105.686	23.481	8.252	1.00	31.47	ADNA O
ATOM	4751	N9	ADE	5	101.752	22.143	10.768	1.00	11.22	ADNA N
ATOM	4752	C4	ADE	5	100.468	22.061	11.253	1.00	2.50	ADNA C
ATOM	4753	N3	ADE	5	100.065	22.191	12.521	1.00	4.31	ADNA N
ATOM	4754	C2	ADE	5	98.735	22.065	12.600	1.00	1.00	ADNA C
ATOM	4755	N1	ADE	5	97.854	21.845	11.635	1.00	1.00	ADNA N
ATOM	4756	C6	ADE	5	98.306	21.712	10.375	1.00	1.00	ADNA C
ATOM	4757	N6	ADE	5	97.433	21.480	9.398	1.00	1.81	ADNA N
ATOM	4758	C5	ADE	5	99.665	21.820	10.157	1.00	1.00	ADNA C
ATOM	4759	N7	ADE	5	100.417	21.724	9.005	1.00	5.02	ADNA N
ATOM	4760	C8	ADE	5	101.646	21.922	9.415	1.00	9.28	ADNA C
ATOM	4761	C2'	ADE	5	104.101	21.418	11.151	1.00	20.27	ADNA C
ATOM	4762	C5'	ADE	5	104.489	23.711	8.995	1.00	27.11	ADNA C
ATOM	4763	C4'	ADE	5	104.752	23.624	10.479	1.00	23.47	ADNA C
ATOM	4764	O4'	ADE	5	103.466	23.711	11.133	1.00	22.75	ADNA O
ATOM	4765	C1'	ADE	5	102.996	22.409	11.510	1.00	17.84	ADNA C
ATOM	4766	C3'	ADE	5	105.327	22.275	10.889	1.00	24.21	ADNA C
ATOM	4767	O3'	ADE	5	106.186	22.393	12.030	1.00	28.05	ADNA O
ATOM	4768	P	GUA	6	106.732	21.060	12.748	1.00	31.53	ADNA P
ATOM	4769	O1P	GUA	6	106.992	20.060	11.676	1.00	29.21	ADNA O
ATOM	4770	O2P	GUA	6	107.820	21.427	13.699	1.00	27.62	ADNA O
ATOM	4771	O5'	GUA	6	105.461	20.596	13.591	1.00	27.12	ADNA O
ATOM	4772	N9	GUA	6	101.274	19.099	13.577	1.00	1.00	ADNA N
ATOM	4773	C4	GUA	6	99.922	18.956	13.443	1.00	1.00	ADNA C
ATOM	4774	N3	GUA	6	99.011	19.043	14.428	1.00	1.00	ADNA N
ATOM	4775	C2	GUA	6	97.777	18.886	13.973	1.00	1.00	ADNA C
ATOM	4776	N2	GUA	6	96.737	18.958	14.805	1.00	1.00	ADNA N
ATOM	4777	N1	GUA	6	97.471	18.656	12.669	1.00	1.00	ADNA N
ATOM	4778	C6	GUA	6	98.394	18.561	11.642	1.00	1.00	ADNA C
ATOM	4779	O6	GUA	6	98.008	18.354	10.487	1.00	4.88	ADNA O
ATOM	4780	C5	GUA	6	99.711	18.729	12.108	1.00	1.00	ADNA C
ATOM	4781	N7	GUA	6	100.908	18.695	11.420	1.00	1.00	ADNA N
ATOM	4782	C8	GUA	6	101.805	18.912	12.334	1.00	1.00	ADNA C
ATOM	4783	C2'	GUA	6	103.185	18.527	15.109	1.00	11.87	ADNA C
ATOM	4784	C5'	GUA	6	104.877	21.500	14.513	1.00	20.83	ADNA C
ATOM	4785	C4'	GUA	6	103.808	20.827	15.336	1.00	15.36	ADNA C
ATOM	4786	O4'	GUA	6	102.594	20.697	14.564	1.00	15.01	ADNA O
ATOM	4787	C1'	GUA	6	102.011	19.432	14.786	1.00	8.02	ADNA C
ATOM	4788	C3'	GUA	6	104.125	19.440	15.887	1.00	14.90	ADNA C
ATOM	4789	O3'	GUA	6	103.843	19.425	17.292	1.00	17.30	ADNA O
ATOM	4790	P	ADE	7	104.264	18.157	18.190	1.00	17.48	ADNA P
ATOM	4791	O1P	ADE	7	104.760	18.683	19.481	1.00	19.48	ADNA O
ATOM	4792	O2P	ADE	7	105.096	17.199	17.424	1.00	13.81	ADNA O
ATOM	4793	O5'	ADE	7	102.850	17.514	18.471	1.00	15.56	ADNA O
ATOM	4794	N9	ADE	7	99.600	15.881	15.819	1.00	6.08	ADNA N
ATOM	4795	C4	ADE	7	98.490	15.720	15.025	1.00	1.00	ADNA C
ATOM	4796	N3	ADE	7	97.213	15.709	15.422	1.00	1.00	ADNA N
ATOM	4797	C2	ADE	7	96.411	15.521	14.392	1.00	1.00	ADNA C
ATOM	4798	N1	ADE	7	96.711	15.347	13.107	1.00	1.00	ADNA N
ATOM	4799	C6	ADE	7	98.002	15.362	12.736	1.00	1.00	ADNA C
ATOM	4800	N6	ADE	7	98.292	15.181	11.446	1.00	1.00	ADNA N
ATOM	4801	C5	ADE	7	98.960	15.565	13.737	1.00	1.00	ADNA C
ATOM	4802	N7	ADE	7	100.347	15.636	13.709	1.00	1.00	ADNA N
ATOM	4803	C8	ADE	7	100.679	15.818	14.968	1.00	2.40	ADNA C
ATOM	4804	C2'	ADE	7	100.515	15.282	18.118	1.00	8.54	ADNA C
ATOM	4805	C5'	ADE	7	101.762	18.360	18.807	1.00	15.80	ADNA C
ATOM	4806	C4'	ADE	7	100.477	17.568	18.841	1.00	14.93	ADNA C
ATOM	4807	O4'	ADE	7	99.900	17.445	17.521	1.00	15.55	ADNA O

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ATOM	4808	C1'	ADE	7	99.562	16.090	17.271	1.00	8.97	ADNA	C
ATOM	4809	C3'	ADE	7	100.639	16.147	19.363	1.00	13.24	ADNA	C
ATOM	4810	O3'	ADE	7	99.614	15.870	20.305	1.00	15.12	ADNA	O
ATOM	4811	P	CYT	8	99.655	14.495	21.098	1.00	17.74	ADNA	P
ATOM	4812	O1P	CYT	8	98.516	14.497	22.034	1.00	15.66	ADNA	O
ATOM	4813	O2P	CYT	8	101.026	14.295	21.605	1.00	17.61	ADNA	O
ATOM	4814	O5'	CYT	8	99.466	13.468	19.908	1.00	18.10	ADNA	O
ATOM	4815	N1	CYT	8	97.383	12.419	16.005	1.00	5.22	ADNA	N
ATOM	4816	C6	CYT	8	98.745	12.486	15.976	1.00	2.67	ADNA	C
ATOM	4817	C2	CYT	8	96.653	12.331	14.812	1.00	3.05	ADNA	C
ATOM	4818	O2	CYT	8	95.403	12.348	14.861	1.00	2.95	ADNA	O
ATOM	4819	N3	CYT	8	97.313	12.227	13.641	1.00	1.00	ADNA	N
ATOM	4820	C4	CYT	8	98.645	12.231	13.628	1.00	2.11	ADNA	C
ATOM	4821	N4	CYT	8	99.255	12.089	12.455	1.00	1.00	ADNA	N
ATOM	4822	C5	CYT	8	99.414	12.381	14.822	1.00	1.00	ADNA	C
ATOM	4823	C2'	CYT	8	96.569	10.981	17.791	1.00	20.18	ADNA	C
ATOM	4824	C5'	CYT	8	98.751	12.282	20.080	1.00	18.03	ADNA	C
ATOM	4825	C4'	CYT	8	97.354	12.452	19.540	1.00	18.69	ADNA	C
ATOM	4826	O4'	CYT	8	97.413	13.114	18.254	1.00	15.06	ADNA	O
ATOM	4827	C1'	CYT	8	96.654	12.398	17.286	1.00	12.37	ADNA	C
ATOM	4828	C3'	CYT	8	96.717	11.093	19.296	1.00	23.57	ADNA	C
ATOM	4829	O3'	CYT	8	95.476	10.904	19.944	1.00	28.67	ADNA	O
ATOM	4830	P	URI	9	94.885	9.413	20.046	1.00	34.80	ADNA	P
ATOM	4831	O1P	URI	9	94.631	9.152	21.488	1.00	32.90	ADNA	O
ATOM	4832	O2P	URI	9	95.750	8.467	19.282	1.00	30.52	ADNA	O
ATOM	4833	O5'	URI	9	93.509	9.587	19.253	1.00	34.74	ADNA	O
ATOM	4834	N1	URI	9	94.496	8.879	14.679	1.00	15.98	ADNA	N
ATOM	4835	C6	URI	9	95.526	9.000	15.599	1.00	15.97	ADNA	C
ATOM	4836	C2	URI	9	94.765	8.588	13.351	1.00	12.54	ADNA	C
ATOM	4837	O2	URI	9	93.890	8.401	12.529	1.00	12.66	ADNA	O
ATOM	4838	N3	URI	9	96.102	8.507	13.029	1.00	8.90	ADNA	N
ATOM	4839	C4	URI	9	97.176	8.656	13.888	1.00	10.18	ADNA	C
ATOM	4840	O4	URI	9	98.310	8.681	13.430	1.00	8.73	ADNA	O
ATOM	4841	C5	URI	9	96.824	8.896	15.257	1.00	12.57	ADNA	C
ATOM	4842	C2'	URI	9	92.364	7.775	15.316	1.00	21.51	ADNA	C
ATOM	4843	C5'	URI	9	93.016	8.569	18.386	1.00	30.86	ADNA	C
ATOM	4844	C4'	URI	9	92.191	9.168	17.268	1.00	24.94	ADNA	C
ATOM	4845	O4'	URI	9	93.080	9.789	16.308	1.00	23.08	ADNA	O
ATOM	4846	C1'	URI	9	93.092	9.077	15.073	1.00	18.58	ADNA	C
ATOM	4847	C3'	URI	9	91.460	8.079	16.495	1.00	23.72	ADNA	C
ATOM	4848	O3'	URI	9	90.162	8.475	16.078	1.00	21.53	ADNA	O
ATOM	4849	P	URI	10	89.101	7.334	15.715	1.00	20.26	ADNA	P
ATOM	4850	O1P	URI	10	87.791	8.002	15.583	1.00	20.68	ADNA	O
ATOM	4851	O2P	URI	10	89.274	6.230	16.691	1.00	20.14	ADNA	O
ATOM	4852	O5'	URI	10	89.600	6.768	14.313	1.00	17.90	ADNA	O
ATOM	4853	N1	URI	10	93.117	5.308	11.890	1.00	4.95	ADNA	N
ATOM	4854	C6	URI	10	93.432	5.291	13.234	1.00	6.74	ADNA	C
ATOM	4855	C2	URI	10	94.098	5.240	10.942	1.00	3.85	ADNA	C
ATOM	4856	O2	URI	10	93.859	5.212	9.752	1.00	1.00	ADNA	O
ATOM	4857	N3	URI	10	95.382	5.200	11.438	1.00	5.14	ADNA	N
ATOM	4858	C4	URI	10	95.768	5.212	12.764	1.00	6.15	ADNA	C
ATOM	4859	O4	URI	10	96.964	5.270	13.050	1.00	7.54	ADNA	O
ATOM	4860	C5	URI	10	94.690	5.244	13.689	1.00	3.46	ADNA	C
ATOM	4861	C2'	URI	10	90.752	4.494	12.147	1.00	11.47	ADNA	C
ATOM	4862	C5'	URI	10	89.405	7.514	13.114	1.00	14.71	ADNA	C
ATOM	4863	C4'	URI	10	89.821	6.696	11.913	1.00	12.99	ADNA	C
ATOM	4864	O4'	URI	10	91.262	6.728	11.702	1.00	10.79	ADNA	O
ATOM	4865	C1'	URI	10	91.723	5.411	11.430	1.00	8.69	ADNA	C
ATOM	4866	C3'	URI	10	89.425	5.221	12.003	1.00	10.14	ADNA	C
TER	4867		URI	10						ADNA	
ATOM	4868	S5'	GUA	11	91.583	-4.893	12.270	1.00	56.74	CDNA	S
ATOM	4869	N9	GUA	11	95.422	-1.346	10.660	1.00	27.06	CDNA	N
ATOM	4870	C4	GUA	11	96.589	-1.406	9.946	1.00	20.28	CDNA	C

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ATOM	4871	N3	GUA	11	96.688	-1.485	8.605	1.00	14.79	CDNA N
ATOM	4872	C2	GUA	11	97.945	-1.481	8.209	1.00	13.59	CDNA C
ATOM	4873	N2	GUA	11	98.224	-1.515	6.908	1.00	13.63	CDNA N
ATOM	4874	N1	GUA	11	99.022	-1.432	9.063	1.00	12.44	CDNA N
ATOM	4875	C6	GUA	11	98.937	-1.361	10.453	1.00	14.76	CDNA C
ATOM	4876	O6	GUA	11	99.961	-1.322	11.136	1.00	13.68	CDNA O
ATOM	4877	C5	GUA	11	97.600	-1.342	10.887	1.00	18.04	CDNA C
ATOM	4878	N7	GUA	11	97.076	-1.258	12.169	1.00	21.81	CDNA N
ATOM	4879	C8	GUA	11	95.781	-1.273	11.987	1.00	25.05	CDNA C
ATOM	4880	C2'	GUA	11	93.794	-2.581	9.270	1.00	43.86	CDNA C
ATOM	4881	C5'	GUA	11	92.709	-3.466	12.222	1.00	49.92	CDNA C
ATOM	4882	C4'	GUA	11	92.297	-2.495	11.136	1.00	48.38	CDNA C
ATOM	4883	O4'	GUA	11	93.173	-1.349	11.201	1.00	42.68	CDNA O
ATOM	4884	C1'	GUA	11	94.075	-1.344	10.106	1.00	36.56	CDNA C
ATOM	4885	C3'	GUA	11	92.408	-3.018	9.703	1.00	48.23	CDNA C
ATOM	4886	O3'	GUA	11	91.413	-2.417	8.869	1.00	51.59	CDNA O
ATOM	4887	P	GUA	12	90.340	-3.346	8.115	1.00	54.26	CDNA P
ATOM	4888	O1P	GUA	12	89.293	-2.445	7.541	1.00	53.25	CDNA O
ATOM	4889	O2P	GUA	12	89.946	-4.437	9.044	1.00	53.36	CDNA O
ATOM	4890	O5'	GUA	12	91.156	-3.972	6.901	1.00	50.90	CDNA O
ATOM	4891	N9	GUA	12	94.797	-5.276	6.823	1.00	25.01	CDNA N
ATOM	4892	C4	GUA	12	96.148	-5.151	6.957	1.00	18.47	CDNA C
ATOM	4893	N3	GUA	12	97.026	-5.054	5.947	1.00	14.84	CDNA N
ATOM	4894	C2	GUA	12	98.252	-4.905	6.383	1.00	12.71	CDNA C
ATOM	4895	N2	GUA	12	99.237	-4.798	5.514	1.00	15.48	CDNA N
ATOM	4896	N1	GUA	12	98.598	-4.850	7.702	1.00	11.18	CDNA N
ATOM	4897	C6	GUA	12	97.708	-4.939	8.763	1.00	13.75	CDNA C
ATOM	4898	O6	GUA	12	98.123	-4.855	9.924	1.00	16.18	CDNA O
ATOM	4899	C5	GUA	12	96.384	-5.112	8.312	1.00	15.45	CDNA C
ATOM	4900	N7	GUA	12	95.202	-5.254	9.020	1.00	18.05	CDNA N
ATOM	4901	C8	GUA	12	94.286	-5.364	8.094	1.00	22.79	CDNA C
ATOM	4902	C2'	GUA	12	92.843	-6.132	5.466	1.00	41.60	CDNA C
ATOM	4903	C5'	GUA	12	91.291	-3.244	5.685	1.00	47.86	CDNA C
ATOM	4904	C4'	GUA	12	92.289	-3.918	4.776	1.00	45.66	CDNA C
ATOM	4905	O4'	GUA	12	93.606	-3.911	5.381	1.00	41.80	CDNA O
ATOM	4906	C1'	GUA	12	94.071	-5.245	5.561	1.00	34.84	CDNA C
ATOM	4907	C3'	GUA	12	91.993	-5.380	4.451	1.00	46.07	CDNA C
ATOM	4908	O3'	GUA	12	92.447	-5.603	3.111	1.00	51.08	CDNA O
ATOM	4909	P	ADE	13	92.075	-6.957	2.347	1.00	54.10	CDNA P
ATOM	4910	O1P	ADE	13	91.380	-7.875	3.294	1.00	53.71	CDNA O
ATOM	4911	O2P	ADE	13	91.410	-6.554	1.084	1.00	54.41	CDNA O
ATOM	4912	O5'	ADE	13	93.507	-7.535	1.970	1.00	52.11	CDNA O
ATOM	4913	N9	ADE	13	96.672	-8.458	4.657	1.00	31.94	CDNA N
ATOM	4914	C4	ADE	13	97.657	-8.282	5.603	1.00	25.55	CDNA C
ATOM	4915	N3	ADE	13	98.964	-8.063	5.389	1.00	21.42	CDNA N
ATOM	4916	C2	ADE	13	99.616	-7.921	6.541	1.00	19.89	CDNA C
ATOM	4917	N1	ADE	13	99.151	-7.967	7.791	1.00	19.61	CDNA N
ATOM	4918	C6	ADE	13	97.833	-8.187	7.980	1.00	21.89	CDNA C
ATOM	4919	N6	ADE	13	97.369	-8.227	9.231	1.00	19.28	CDNA N
ATOM	4920	C5	ADE	13	97.023	-8.359	6.830	1.00	24.01	CDNA C
ATOM	4921	N7	ADE	13	95.661	-8.589	6.664	1.00	26.27	CDNA N
ATOM	4922	C8	ADE	13	95.507	-8.645	5.360	1.00	29.28	CDNA C
ATOM	4923	C2'	ADE	13	96.048	-9.444	2.432	1.00	46.84	CDNA C
ATOM	4924	C5'	ADE	13	94.459	-6.690	1.333	1.00	51.28	CDNA C
ATOM	4925	C4'	ADE	13	95.841	-7.294	1.413	1.00	50.65	CDNA C
ATOM	4926	O4'	ADE	13	96.411	-7.158	2.739	1.00	47.71	CDNA O
ATOM	4927	C1'	ADE	13	96.859	-8.425	3.206	1.00	40.20	CDNA C
ATOM	4928	C3'	ADE	13	95.905	-8.778	1.072	1.00	51.74	CDNA C
ATOM	4929	O3'	ADE	13	97.059	-8.999	0.271	1.00	57.48	CDNA O
ATOM	4930	P	ADE	14	97.240	-10.389	-0.506	1.00	62.32	CDNA P
ATOM	4931	O1P	ADE	14	97.052	-10.102	-1.953	1.00	61.22	CDNA O
ATOM	4932	O2P	ADE	14	96.420	-11.446	0.149	1.00	61.85	CDNA O
ATOM	4933	O5'	ADE	14	98.773	-10.716	-0.236	1.00	62.89	CDNA O

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ATOM	4934	N9	ADE	14	99.649	-11.353	3.897	1.00	48.86	CDNA	N
ATOM	4935	C4	ADE	14	99.806	-11.276	5.263	1.00	44.66	CDNA	C
ATOM	4936	N3	ADE	14	100.942	-11.055	5.945	1.00	44.07	CDNA	N
ATOM	4937	C2	ADE	14	100.704	-11.012	7.260	1.00	42.48	CDNA	C
ATOM	4938	N1	ADE	14	99.548	-11.151	7.916	1.00	40.41	CDNA	N
ATOM	4939	C6	ADE	14	98.426	-11.373	7.197	1.00	40.62	CDNA	C
ATOM	4940	N6	ADE	14	97.270	-11.502	7.842	1.00	39.07	CDNA	N
ATOM	4941	C5	ADE	14	98.543	-11.447	5.799	1.00	42.67	CDNA	C
ATOM	4942	N7	ADE	14	97.608	-11.655	4.796	1.00	43.85	CDNA	N
ATOM	4943	C8	ADE	14	98.313	-11.598	3.691	1.00	47.00	CDNA	C
ATOM	4944	C2'	ADE	14	100.762	-12.234	1.797	1.00	57.84	CDNA	C
ATOM	4945	C5'	ADE	14	99.721	-9.654	-0.114	1.00	61.50	CDNA	C
ATOM	4946	C4'	ADE	14	100.841	-10.049	0.820	1.00	59.98	CDNA	C
ATOM	4947	O4'	ADE	14	100.432	-9.945	2.207	1.00	57.67	CDNA	O
ATOM	4948	C1'	ADE	14	100.694	-11.170	2.885	1.00	54.43	CDNA	C
ATOM	4949	C3'	ADE	14	101.379	-11.470	0.633	1.00	60.76	CDNA	C
ATOM	4950	O3'	ADE	14	102.814	-11.414	0.698	1.00	63.35	CDNA	O
ATOM	4951	P	ADE	15	103.701	-12.741	0.464	1.00	64.23	CDNA	P
ATOM	4952	O1P	ADE	15	104.619	-12.465	-0.675	1.00	63.19	CDNA	O
ATOM	4953	O2P	ADE	15	102.820	-13.948	0.428	1.00	62.76	CDNA	O
ATOM	4954	O5'	ADE	15	104.570	-12.773	1.797	1.00	61.07	CDNA	O
ATOM	4955	N9	ADE	15	102.514	-14.206	5.995	1.00	44.13	CDNA	N
ATOM	4956	C4	ADE	15	101.734	-14.162	7.129	1.00	39.47	CDNA	C
ATOM	4957	N3	ADE	15	102.120	-13.838	8.375	1.00	35.87	CDNA	N
ATOM	4958	C2	ADE	15	101.091	-13.912	9.220	1.00	35.43	CDNA	C
ATOM	4959	N1	ADE	15	99.814	-14.243	8.979	1.00	34.06	CDNA	N
ATOM	4960	C6	ADE	15	99.457	-14.554	7.714	1.00	34.51	CDNA	C
ATOM	4961	N6	ADE	15	98.188	-14.861	7.470	1.00	31.91	CDNA	N
ATOM	4962	C5	ADE	15	100.458	-14.524	6.724	1.00	36.92	CDNA	C
ATOM	4963	N7	ADE	15	100.431	-14.789	5.363	1.00	38.58	CDNA	N
ATOM	4964	C8	ADE	15	101.669	-14.584	4.978	1.00	41.33	CDNA	C
ATOM	4965	C2'	ADE	15	104.700	-14.870	4.974	1.00	53.29	CDNA	C
ATOM	4966	C5'	ADE	15	103.954	-12.442	3.032	1.00	57.70	CDNA	C
ATOM	4967	C4'	ADE	15	104.917	-12.618	4.177	1.00	55.47	CDNA	C
ATOM	4968	O4'	ADE	15	104.102	-12.603	5.373	1.00	53.81	CDNA	O
ATOM	4969	C1'	ADE	15	103.952	-13.919	5.905	1.00	50.52	CDNA	C
ATOM	4970	C3'	ADE	15	105.630	-13.968	4.177	1.00	55.67	CDNA	C
ATOM	4971	O3'	ADE	15	106.940	-13.835	4.749	1.00	56.69	CDNA	O
ATOM	4972	P	ADE	16	107.849	-15.141	4.997	1.00	56.51	CDNA	P
ATOM	4973	O1P	ADE	16	109.284	-14.726	4.968	1.00	55.39	CDNA	O
ATOM	4974	O2P	ADE	16	107.378	-16.227	4.104	1.00	56.61	CDNA	O
ATOM	4975	O5'	ADE	16	107.495	-15.520	6.496	1.00	53.81	CDNA	O
ATOM	4976	N9	ADE	16	103.950	-16.920	8.600	1.00	36.93	CDNA	N
ATOM	4977	C4	ADE	16	102.779	-16.991	9.307	1.00	32.08	CDNA	C
ATOM	4978	N3	ADE	16	102.605	-16.716	10.609	1.00	30.61	CDNA	N
ATOM	4979	C2	ADE	16	101.328	-16.886	10.954	1.00	30.19	CDNA	C
ATOM	4980	N1	ADE	16	100.286	-17.259	10.196	1.00	26.96	CDNA	N
ATOM	4981	C6	ADE	16	100.499	-17.509	8.887	1.00	27.12	CDNA	C
ATOM	4982	N6	ADE	16	99.456	-17.839	8.127	1.00	25.78	CDNA	N
ATOM	4983	C5	ADE	16	101.814	-17.389	8.403	1.00	29.41	CDNA	C
ATOM	4984	N7	ADE	16	102.372	-17.588	7.148	1.00	31.85	CDNA	N
ATOM	4985	C8	ADE	16	103.640	-17.299	7.318	1.00	34.25	CDNA	C
ATOM	4986	C2'	ADE	16	106.441	-17.353	8.910	1.00	47.82	CDNA	C
ATOM	4987	C5'	ADE	16	107.582	-14.528	7.502	1.00	51.72	CDNA	C
ATOM	4988	C4'	ADE	16	106.982	-15.034	8.787	1.00	50.89	CDNA	C
ATOM	4989	O4'	ADE	16	105.553	-15.225	8.640	1.00	49.92	CDNA	O
ATOM	4990	C1'	ADE	16	105.223	-16.494	9.175	1.00	44.31	CDNA	C
ATOM	4991	C3'	ADE	16	107.533	-16.369	9.290	1.00	50.26	CDNA	C
ATOM	4992	O3'	ADE	16	107.614	-16.276	10.711	1.00	53.00	CDNA	O
ATOM	4993	P	ADE	17	108.381	-17.402	11.551	1.00	56.85	CDNA	P
ATOM	4994	O1P	ADE	17	109.485	-16.704	12.256	1.00	55.85	CDNA	O
ATOM	4995	O2P	ADE	17	108.694	-18.544	10.643	1.00	56.13	CDNA	O
ATOM	4996	O5'	ADE	17	107.288	-17.849	12.629	1.00	54.82	CDNA	O

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ATOM	4997	N9	ADE	17	103.575	-19.576	12.104	1.00	36.41	CDNA	N
ATOM	4998	C4	ADE	17	102.287	-19.829	11.704	1.00	31.93	CDNA	C
ATOM	4999	N3	ADE	17	101.167	-19.722	12.438	1.00	30.30	CDNA	N
ATOM	5000	C2	ADE	17	100.100	-20.069	11.716	1.00	28.17	CDNA	C
ATOM	5001	N1	ADE	17	100.033	-20.469	10.437	1.00	25.80	CDNA	N
ATOM	5002	C6	ADE	17	101.177	-20.544	9.726	1.00	27.20	CDNA	C
ATOM	5003	N6	ADE	17	101.117	-20.909	8.447	1.00	25.60	CDNA	N
ATOM	5004	C5	ADE	17	102.374	-20.221	10.378	1.00	29.59	CDNA	C
ATOM	5005	N7	ADE	17	103.691	-20.211	9.948	1.00	31.20	CDNA	N
ATOM	5006	C8	ADE	17	104.362	-19.821	11.006	1.00	34.91	CDNA	C
ATOM	5007	C2'	ADE	17	105.233	-19.865	13.937	1.00	47.81	CDNA	C
ATOM	5008	C5'	ADE	17	106.643	-16.881	13.466	1.00	51.47	CDNA	C
ATOM	5009	C4'	ADE	17	105.494	-17.508	14.225	1.00	50.69	CDNA	C
ATOM	5010	O4'	ADE	17	104.375	-17.770	13.344	1.00	48.24	CDNA	O
ATOM	5011	C1'	ADE	17	104.004	-19.141	13.430	1.00	43.25	CDNA	C
ATOM	5012	C3'	ADE	17	105.817	-18.843	14.896	1.00	53.48	CDNA	C
ATOM	5013	O3'	ADE	17	105.163	-18.928	16.169	1.00	59.28	CDNA	O
ATOM	5014	P	URI	18	105.719	-19.950	17.283	1.00	62.97	CDNA	P
ATOM	5015	O1P	URI	18	105.783	-19.199	18.564	1.00	61.67	CDNA	O
ATOM	5016	O2P	URI	18	106.948	-20.612	16.748	1.00	61.51	CDNA	O
ATOM	5017	O5'	URI	18	104.561	-21.035	17.416	1.00	61.51	CDNA	O
ATOM	5018	N1	URI	18	101.724	-23.068	13.525	1.00	46.43	CDNA	N
ATOM	5019	C6	URI	18	103.069	-23.175	13.271	1.00	43.97	CDNA	C
ATOM	5020	C2	URI	18	100.794	-23.252	12.523	1.00	43.95	CDNA	C
ATOM	5021	O2	URI	18	99.598	-23.190	12.716	1.00	42.00	CDNA	O
ATOM	5022	N3	URI	18	101.318	-23.510	11.285	1.00	41.72	CDNA	N
ATOM	5023	C4	URI	18	102.652	-23.607	10.956	1.00	43.38	CDNA	C
ATOM	5024	O4	URI	18	102.970	-23.781	9.777	1.00	42.91	CDNA	O
ATOM	5025	C5	URI	18	103.553	-23.430	12.054	1.00	42.35	CDNA	C
ATOM	5026	C2'	URI	18	101.631	-23.688	15.986	1.00	58.27	CDNA	C
ATOM	5027	C5'	URI	18	103.878	-21.492	16.262	1.00	60.10	CDNA	C
ATOM	5028	C4'	URI	18	102.386	-21.503	16.497	1.00	59.28	CDNA	C
ATOM	5029	O4'	URI	18	101.759	-21.461	15.199	1.00	57.23	CDNA	O
ATOM	5030	C1'	URI	18	101.223	-22.730	14.865	1.00	52.92	CDNA	C
ATOM	5031	C3'	URI	18	101.851	-22.763	17.173	1.00	60.93	CDNA	C
ATOM	5032	O3'	URI	18	100.623	-22.465	17.884	1.00	65.08	CDNA	O
ATOM	5033	P	URI	19	100.013	-23.521	18.951	1.00	67.15	CDNA	P
ATOM	5034	O1P	URI	19	99.177	-22.737	19.899	1.00	65.86	CDNA	O
ATOM	5035	O2P	URI	19	101.115	-24.371	19.480	1.00	66.07	CDNA	O
ATOM	5036	O5'	URI	19	99.004	-24.422	18.094	1.00	65.92	CDNA	O
ATOM	5037	N1	URI	19	99.395	-26.283	14.363	1.00	51.64	CDNA	N
ATOM	5038	C6	URI	19	100.538	-26.223	15.125	1.00	49.18	CDNA	C
ATOM	5039	C2	URI	19	99.461	-26.522	12.996	1.00	47.68	CDNA	C
ATOM	5040	O2	URI	19	98.476	-26.601	12.290	1.00	46.15	CDNA	O
ATOM	5041	N3	URI	19	100.728	-26.672	12.492	1.00	45.51	CDNA	N
ATOM	5042	C4	URI	19	101.915	-26.616	13.200	1.00	46.69	CDNA	C
ATOM	5043	O4	URI	19	102.986	-26.746	12.601	1.00	44.00	CDNA	O
ATOM	5044	C5	URI	19	101.762	-26.379	14.606	1.00	47.41	CDNA	C
ATOM	5045	C2'	URI	19	97.785	-26.962	16.178	1.00	63.65	CDNA	C
ATOM	5046	C5'	URI	19	97.721	-23.905	17.720	1.00	64.88	CDNA	C
ATOM	5047	C4'	URI	19	97.099	-24.709	16.596	1.00	65.11	CDNA	C
ATOM	5048	O4'	URI	19	97.983	-24.762	15.446	1.00	63.08	CDNA	O
ATOM	5049	C1'	URI	19	98.066	-26.093	14.966	1.00	58.35	CDNA	C
ATOM	5050	C3'	URI	19	96.714	-26.160	16.900	1.00	66.68	CDNA	C
ATOM	5051	O3'	URI	19	95.413	-26.451	16.349	1.00	71.29	CDNA	O
ATOM	5052	P	URI	20	94.403	-27.435	17.140	1.00	74.07	CDNA	P
ATOM	5053	O1P	URI	20	94.229	-26.917	18.531	1.00	72.12	CDNA	O
ATOM	5054	O2P	URI	20	94.847	-28.842	16.925	1.00	73.56	CDNA	O
ATOM	5055	O5'	URI	20	93.012	-27.262	16.388	1.00	73.00	CDNA	O
ATOM	5056	N1	URI	20	96.043	-29.451	13.411	1.00	58.65	CDNA	N
ATOM	5057	C6	URI	20	96.783	-29.495	14.568	1.00	55.47	CDNA	C
ATOM	5058	C2	URI	20	96.637	-29.636	12.176	1.00	55.86	CDNA	C
ATOM	5059	O2	URI	20	96.004	-29.604	11.128	1.00	54.41	CDNA	O



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ATOM	5060	N3	URI	20	97.993	-29.854	12.208	1.00	52.19	CDNA	N
ATOM	5061	C4	URI	20	98.800	-29.897	13.323	1.00	50.99	CDNA	C
ATOM	5062	O4	URI	20	100.018	-30.009	13.180	1.00	47.55	CDNA	O
ATOM	5063	C5	URI	20	98.108	-29.705	14.568	1.00	52.18	CDNA	C
ATOM	5064	C2'	URI	20	93.754	-29.849	14.493	1.00	69.67	CDNA	C
ATOM	5065	C5'	URI	20	92.927	-26.621	15.118	1.00	72.40	CDNA	C
ATOM	5066	C4'	URI	20	93.003	-27.641	14.004	1.00	72.19	CDNA	C
ATOM	5067	O4'	URI	20	94.368	-27.817	13.551	1.00	69.63	CDNA	O
ATOM	5068	C1'	URI	20	94.595	-29.206	13.410	1.00	65.55	CDNA	C
ATOM	5069	C3'	URI	20	92.473	-29.051	14.311	1.00	73.20	CDNA	C
ATOM	5070	O3'	URI	20	91.767	-29.545	13.157	1.00	77.63	CDNA	O
ATOM	5071	P	URI	21	91.083	-31.004	13.181	1.00	80.22	CDNA	P
ATOM	5072	O1P	URI	21	89.635	-30.816	13.442	1.00	80.94	CDNA	O
ATOM	5073	O2P	URI	21	91.876	-31.903	14.058	1.00	80.91	CDNA	O
ATOM	5074	O5'	URI	21	91.225	-31.507	11.676	1.00	81.01	CDNA	O
ATOM	5075	N1	URI	21	94.413	-32.782	10.206	1.00	76.30	CDNA	N
ATOM	5076	C6	URI	21	94.222	-32.598	11.558	1.00	73.29	CDNA	C
ATOM	5077	C2	URI	21	95.646	-33.169	9.707	1.00	73.64	CDNA	C
ATOM	5078	O2	URI	21	95.852	-33.363	8.516	1.00	72.69	CDNA	O
ATOM	5079	N3	URI	21	96.626	-33.326	10.655	1.00	71.19	CDNA	N
ATOM	5080	C4	URI	21	96.502	-33.146	12.020	1.00	69.85	CDNA	C
ATOM	5081	O4	URI	21	97.491	-33.294	12.741	1.00	67.95	CDNA	O
ATOM	5082	C5	URI	21	95.197	-32.764	12.456	1.00	69.93	CDNA	C
ATOM	5083	C2'	URI	21	92.114	-33.464	9.454	1.00	83.83	CDNA	C
ATOM	5084	C5'	URI	21	90.827	-30.672	10.590	1.00	82.71	CDNA	C
ATOM	5085	C4'	URI	21	91.408	-31.187	9.294	1.00	84.20	CDNA	C
ATOM	5086	O4'	URI	21	92.851	-31.232	9.417	1.00	82.51	CDNA	O
ATOM	5087	C1'	URI	21	93.320	-32.564	9.247	1.00	80.76	CDNA	C
ATOM	5088	C3'	URI	21	90.978	-32.605	8.924	1.00	86.10	CDNA	C
ATOM	5089	O3'	URI	21	90.866	-32.718	7.499	1.00	90.25	CDNA	O
ATOM	5090	P	THY	22	90.620	-34.161	6.830	1.00	93.46	CDNA	P
ATOM	5091	O1P	THY	22	89.945	-33.943	5.518	1.00	93.49	CDNA	O
ATOM	5092	O2P	THY	22	89.990	-35.048	7.847	1.00	93.42	CDNA	O
ATOM	5093	O5'	THY	22	92.089	-34.704	6.535	1.00	91.83	CDNA	O
ATOM	5094	N1	THY	22	95.509	-36.417	8.050	1.00	80.39	CDNA	N
ATOM	5095	C6	THY	22	94.540	-36.277	9.024	1.00	77.67	CDNA	C
ATOM	5096	C2	THY	22	96.844	-36.545	8.383	1.00	78.31	CDNA	C
ATOM	5097	O2	THY	22	97.734	-36.620	7.552	1.00	77.51	CDNA	O
ATOM	5098	N3	THY	22	97.099	-36.576	9.734	1.00	76.46	CDNA	N
ATOM	5099	C4	THY	22	96.180	-36.478	10.761	1.00	75.62	CDNA	C
ATOM	5100	O4	THY	22	96.559	-36.552	11.933	1.00	73.48	CDNA	O
ATOM	5101	C5	THY	22	94.803	-36.298	10.340	1.00	76.13	CDNA	C
ATOM	5102	C5A	THY	22	93.740	-36.143	11.381	1.00	75.54	CDNA	C
ATOM	5103	C2'	THY	22	93.864	-37.209	6.281	1.00	85.15	CDNA	C
ATOM	5104	C5'	THY	22	92.842	-34.197	5.437	1.00	89.34	CDNA	C
ATOM	5105	C4'	THY	22	93.960	-35.150	5.087	1.00	87.31	CDNA	C
ATOM	5106	O4'	THY	22	94.949	-35.138	6.149	1.00	86.39	CDNA	O
ATOM	5107	C1'	THY	22	95.148	-36.464	6.614	1.00	83.85	CDNA	C
ATOM	5108	C3'	THY	22	93.520	-36.608	4.931	1.00	86.01	CDNA	C
ATOM	5109	O3'	THY	22	94.365	-37.282	4.003	1.00	85.31	CDNA	O
TER	5110		THY	22						CDNA	
ATOM	5111	O5'	ADE	101	108.104	-34.780	11.763	1.00	85.02	BDNA	O
ATOM	5112	N9	ADE	101	103.818	-37.203	11.747	1.00	77.10	BDNA	N
ATOM	5113	C4	ADE	101	102.499	-37.080	11.390	1.00	73.91	BDNA	C
ATOM	5114	N3	ADE	101	101.962	-37.292	10.177	1.00	72.24	BDNA	N
ATOM	5115	C2	ADE	101	100.647	-37.101	10.210	1.00	72.01	BDNA	C
ATOM	5116	N1	ADE	101	99.867	-36.746	11.240	1.00	71.81	BDNA	N
ATOM	5117	C6	ADE	101	100.442	-36.536	12.444	1.00	71.87	BDNA	C
ATOM	5118	N6	ADE	101	99.666	-36.182	13.469	1.00	71.38	BDNA	N
ATOM	5119	C5	ADE	101	101.830	-36.705	12.542	1.00	72.64	BDNA	C
ATOM	5120	N7	ADE	101	102.713	-36.572	13.603	1.00	73.00	BDNA	N
ATOM	5121	C8	ADE	101	103.876	-36.874	13.083	1.00	75.25	BDNA	C
ATOM	5122	C2'	ADE	101	105.287	-36.562	9.836	1.00	83.25	BDNA	C

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ATOM	5123	C5'	ADE	101	107.274	-35.832	12.250	1.00	84.47	BDNA	C
ATOM	5124	C4'	ADE	101	107.151	-36.978	11.270	1.00	84.33	BDNA	C
ATOM	5125	O4'	ADE	101	106.060	-37.819	11.697	1.00	82.62	BDNA	O
ATOM	5126	C1'	ADE	101	104.918	-37.615	10.873	1.00	80.72	BDNA	C
ATOM	5127	C3'	ADE	101	106.804	-36.545	9.849	1.00	85.07	BDNA	C
ATOM	5128	O3'	ADE	101	107.363	-37.449	8.890	1.00	87.53	BDNA	O
ATOM	5129	P	ADE	102	108.118	-36.864	7.596	1.00	89.72	BDNA	P
ATOM	5130	O1P	ADE	102	108.559	-38.012	6.762	1.00	89.76	BDNA	O
ATOM	5131	O2P	ADE	102	109.116	-35.864	8.056	1.00	89.67	BDNA	O
ATOM	5132	O5'	ADE	102	106.972	-36.092	6.805	1.00	90.14	BDNA	O
ATOM	5133	N9	ADE	102	103.438	-34.052	8.078	1.00	82.25	BDNA	N
ATOM	5134	C4	ADE	102	102.176	-33.977	8.623	1.00	80.11	BDNA	C
ATOM	5135	N3	ADE	102	100.999	-34.144	7.992	1.00	78.37	BDNA	N
ATOM	5136	C2	ADE	102	99.983	-33.993	8.841	1.00	76.91	BDNA	C
ATOM	5137	N1	ADE	102	100.004	-33.715	10.149	1.00	76.19	BDNA	N
ATOM	5138	C6	ADE	102	101.201	-33.552	10.755	1.00	77.72	BDNA	C
ATOM	5139	N6	ADE	102	101.223	-33.278	12.063	1.00	76.83	BDNA	N
ATOM	5140	C5	ADE	102	102.360	-33.686	9.962	1.00	79.09	BDNA	C
ATOM	5141	N7	ADE	102	103.712	-33.585	10.259	1.00	79.98	BDNA	N
ATOM	5142	C8	ADE	102	104.306	-33.815	9.112	1.00	80.97	BDNA	C
ATOM	5143	C2'	ADE	102	105.023	-33.615	6.197	1.00	87.98	BDNA	C
ATOM	5144	C5'	ADE	102	106.105	-36.789	5.916	1.00	90.30	BDNA	C
ATOM	5145	C4'	ADE	102	104.985	-35.885	5.455	1.00	89.63	BDNA	C
ATOM	5146	O4'	ADE	102	104.023	-35.692	6.523	1.00	87.67	BDNA	O
ATOM	5147	C1'	ADE	102	103.767	-34.308	6.677	1.00	85.37	BDNA	C
ATOM	5148	C3'	ADE	102	105.430	-34.486	5.022	1.00	89.94	BDNA	C
ATOM	5149	O3'	ADE	102	104.733	-34.106	3.830	1.00	91.57	BDNA	O
ATOM	5150	P	ADE	103	104.799	-32.583	3.297	1.00	92.44	BDNA	P
ATOM	5151	O1P	ADE	103	105.293	-32.621	1.897	1.00	92.66	BDNA	O
ATOM	5152	O2P	ADE	103	105.484	-31.710	4.291	1.00	92.56	BDNA	O
ATOM	5153	O5'	ADE	103	103.261	-32.185	3.247	1.00	89.57	BDNA	O
ATOM	5154	N9	ADE	103	100.769	-30.981	6.241	1.00	61.00	BDNA	N
ATOM	5155	C4	ADE	103	100.053	-30.837	7.404	1.00	55.21	BDNA	C
ATOM	5156	N3	ADE	103	98.723	-30.929	7.561	1.00	51.76	BDNA	N
ATOM	5157	C2	ADE	103	98.387	-30.749	8.837	1.00	49.89	BDNA	C
ATOM	5158	N1	ADE	103	99.170	-30.501	9.894	1.00	48.74	BDNA	N
ATOM	5159	C6	ADE	103	100.503	-30.405	9.699	1.00	50.88	BDNA	C
ATOM	5160	N6	ADE	103	101.285	-30.144	10.746	1.00	50.88	BDNA	N
ATOM	5161	C5	ADE	103	100.987	-30.585	8.393	1.00	52.92	BDNA	C
ATOM	5162	N7	ADE	103	102.267	-30.559	7.862	1.00	54.74	BDNA	N
ATOM	5163	C8	ADE	103	102.083	-30.796	6.586	1.00	58.14	BDNA	C
ATOM	5164	C2'	ADE	103	100.715	-30.373	3.812	1.00	75.62	BDNA	C
ATOM	5165	C5'	ADE	103	102.292	-33.159	2.860	1.00	84.63	BDNA	C
ATOM	5166	C4'	ADE	103	100.896	-32.658	3.137	1.00	80.25	BDNA	C
ATOM	5167	O4'	ADE	103	100.663	-32.586	4.565	1.00	76.02	BDNA	O
ATOM	5168	C1'	ADE	103	100.224	-31.285	4.920	1.00	69.75	BDNA	C
ATOM	5169	C3'	ADE	103	100.607	-31.264	2.586	1.00	79.47	BDNA	C
ATOM	5170	O3'	ADE	103	99.287	-31.231	2.044	1.00	81.74	BDNA	O
ATOM	5171	P	ADE	104	98.845	-30.012	1.099	1.00	83.48	BDNA	P
ATOM	5172	O1P	ADE	104	98.318	-30.597	-0.164	1.00	83.16	BDNA	O
ATOM	5173	O2P	ADE	104	99.957	-29.024	1.044	1.00	83.85	BDNA	O
ATOM	5174	O5'	ADE	104	97.632	-29.366	1.902	1.00	80.52	BDNA	O
ATOM	5175	N9	ADE	104	98.045	-27.736	5.843	1.00	47.00	BDNA	N
ATOM	5176	C4	ADE	104	98.243	-27.573	7.195	1.00	37.96	BDNA	C
ATOM	5177	N3	ADE	104	97.316	-27.607	8.162	1.00	33.36	BDNA	N
ATOM	5178	C2	ADE	104	97.869	-27.404	9.354	1.00	30.05	BDNA	C
ATOM	5179	N1	ADE	104	99.150	-27.201	9.674	1.00	28.09	BDNA	N
ATOM	5180	C6	ADE	104	100.066	-27.194	8.687	1.00	32.13	BDNA	C
ATOM	5181	N6	ADE	104	101.355	-27.044	9.019	1.00	28.68	BDNA	N
ATOM	5182	C5	ADE	104	99.599	-27.370	7.360	1.00	35.26	BDNA	C
ATOM	5183	N7	ADE	104	100.248	-27.389	6.131	1.00	38.72	BDNA	N
ATOM	5184	C8	ADE	104	99.284	-27.609	5.267	1.00	43.24	BDNA	C
ATOM	5185	C2'	ADE	104	96.472	-27.182	3.943	1.00	64.89	BDNA	C

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ATOM	5186	C5'	ADE	104	96.624	-30.198	2.468	1.00	74.78	BDNA	C
ATOM	5187	C4'	ADE	104	95.903	-29.472	3.579	1.00	70.07	BDNA	C
ATOM	5188	O4'	ADE	104	96.742	-29.352	4.756	1.00	65.25	BDNA	O
ATOM	5189	C1'	ADE	104	96.757	-27.999	5.190	1.00	57.97	BDNA	C
ATOM	5190	C3'	ADE	104	95.445	-28.054	3.238	1.00	69.45	BDNA	C
ATOM	5191	O3'	ADE	104	94.142	-27.857	3.795	1.00	72.75	BDNA	O
ATOM	5192	P	ADE	105	93.336	-26.499	3.507	1.00	74.19	BDNA	P
ATOM	5193	O1P	ADE	105	92.051	-26.879	2.861	1.00	74.73	BDNA	O
ATOM	5194	O2P	ADE	105	94.227	-25.509	2.842	1.00	74.96	BDNA	O
ATOM	5195	O5'	ADE	105	93.013	-25.981	4.974	1.00	71.76	BDNA	O
ATOM	5196	N9	ADE	105	95.452	-24.545	7.893	1.00	44.22	BDNA	N
ATOM	5197	C4	ADE	105	96.431	-24.331	8.832	1.00	38.34	BDNA	C
ATOM	5198	N3	ADE	105	96.278	-24.258	10.164	1.00	36.57	BDNA	N
ATOM	5199	C2	ADE	105	97.453	-24.033	10.758	1.00	34.83	BDNA	C
ATOM	5200	N1	ADE	105	98.670	-23.892	10.211	1.00	31.81	BDNA	N
ATOM	5201	C6	ADE	105	98.789	-23.986	8.872	1.00	32.42	BDNA	C
ATOM	5202	N6	ADE	105	100.004	-23.875	8.334	1.00	30.27	BDNA	N
ATOM	5203	C5	ADE	105	97.616	-24.208	8.124	1.00	34.71	BDNA	C
ATOM	5204	N7	ADE	105	97.389	-24.340	6.763	1.00	36.93	BDNA	N
ATOM	5205	C8	ADE	105	96.093	-24.541	6.679	1.00	41.22	BDNA	C
ATOM	5206	C2'	ADE	105	93.108	-23.887	7.298	1.00	60.44	BDNA	C
ATOM	5207	C5'	ADE	105	92.457	-26.863	5.945	1.00	67.60	BDNA	C
ATOM	5208	C4'	ADE	105	92.379	-26.171	7.284	1.00	64.61	BDNA	C
ATOM	5209	O4'	ADE	105	93.700	-26.083	7.874	1.00	60.92	BDNA	O
ATOM	5210	C1'	ADE	105	94.026	-24.732	8.166	1.00	54.15	BDNA	C
ATOM	5211	C3'	ADE	105	91.855	-24.739	7.191	1.00	64.82	BDNA	C
ATOM	5212	O3'	ADE	105	90.939	-24.467	8.253	1.00	69.22	BDNA	O
ATOM	5213	P	THY	106	90.142	-23.070	8.276	1.00	72.65	BDNA	P
ATOM	5214	O1P	THY	106	88.712	-23.366	8.562	1.00	72.18	BDNA	O
ATOM	5215	O2P	THY	106	90.505	-22.299	7.047	1.00	71.07	BDNA	O
ATOM	5216	O5'	THY	106	90.762	-22.354	9.553	1.00	70.20	BDNA	O
ATOM	5217	N1	THY	106	95.299	-21.119	10.604	1.00	48.09	BDNA	N
ATOM	5218	C6	THY	106	94.865	-21.250	9.299	1.00	43.46	BDNA	C
ATOM	5219	C2	THY	106	96.622	-20.883	10.896	1.00	43.61	BDNA	C
ATOM	5220	O2	THY	106	97.034	-20.738	12.032	1.00	43.90	BDNA	O
ATOM	5221	N3	THY	106	97.450	-20.826	9.801	1.00	38.66	BDNA	N
ATOM	5222	C4	THY	106	97.090	-20.976	8.476	1.00	37.56	BDNA	C
ATOM	5223	O4	THY	106	97.945	-20.928	7.607	1.00	33.82	BDNA	O
ATOM	5224	C5	THY	106	95.681	-21.194	8.238	1.00	38.97	BDNA	C
ATOM	5225	C5A	THY	106	95.199	-21.349	6.834	1.00	36.33	BDNA	C
ATOM	5226	C2'	THY	106	93.215	-20.228	11.673	1.00	61.11	BDNA	C
ATOM	5227	C5'	THY	106	92.125	-22.574	9.894	1.00	66.70	BDNA	C
ATOM	5228	C4'	THY	106	92.334	-22.424	11.381	1.00	63.87	BDNA	C
ATOM	5229	O4'	THY	106	93.751	-22.543	11.615	1.00	59.79	BDNA	O
ATOM	5230	C1'	THY	106	94.345	-21.253	11.723	1.00	55.53	BDNA	C
ATOM	5231	C3'	THY	106	91.957	-21.045	11.906	1.00	64.95	BDNA	C
ATOM	5232	O3'	THY	106	91.590	-21.118	13.292	1.00	68.91	BDNA	O
ATOM	5233	P	URI	107	91.197	-19.775	14.089	1.00	70.71	BDNA	P
ATOM	5234	O1P	URI	107	90.525	-20.186	15.355	1.00	70.68	BDNA	O
ATOM	5235	O2P	URI	107	90.508	-18.836	13.156	1.00	70.50	BDNA	O
ATOM	5236	O5'	URI	107	92.614	-19.172	14.490	1.00	69.29	BDNA	O
ATOM	5237	N1	URI	107	96.097	-17.712	12.436	1.00	49.31	BDNA	N
ATOM	5238	C6	URI	107	94.957	-17.731	11.670	1.00	46.74	BDNA	C
ATOM	5239	C2	URI	107	97.350	-17.587	11.844	1.00	46.23	BDNA	C
ATOM	5240	O2	URI	107	98.394	-17.504	12.487	1.00	43.50	BDNA	O
ATOM	5241	N3	URI	107	97.336	-17.553	10.469	1.00	42.89	BDNA	N
ATOM	5242	C4	URI	107	96.227	-17.604	9.646	1.00	42.19	BDNA	C
ATOM	5243	O4	URI	107	96.379	-17.641	8.426	1.00	39.06	BDNA	O
ATOM	5244	C5	URI	107	94.979	-17.681	10.333	1.00	43.40	BDNA	C
ATOM	5245	C2'	URI	107	95.021	-16.985	14.623	1.00	59.91	BDNA	C
ATOM	5246	C5'	URI	107	93.550	-19.980	15.197	1.00	66.36	BDNA	C
ATOM	5247	C4'	URI	107	94.853	-19.243	15.391	1.00	63.52	BDNA	C
ATOM	5248	O4'	URI	107	95.635	-19.199	14.173	1.00	59.77	BDNA	O

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ATOM	5249	C1'	URI	107	96.033	-17.861	13.899	1.00	55.75	BDNA	C
ATOM	5250	C3'	URI	107	94.721	-17.802	15.872	1.00	63.30	BDNA	C
ATOM	5251	O3'	URI	107	95.704	-17.595	16.886	1.00	66.47	BDNA	O
ATOM	5252	P	URI	108	95.652	-16.275	17.791	1.00	67.97	BDNA	P
ATOM	5253	O1P	URI	108	95.894	-16.701	19.197	1.00	67.71	BDNA	O
ATOM	5254	O2P	URI	108	94.413	-15.522	17.448	1.00	68.07	BDNA	O
ATOM	5255	O5'	URI	108	96.941	-15.473	17.304	1.00	66.12	BDNA	O
ATOM	5256	N1	URI	108	98.331	-14.020	13.425	1.00	38.84	BDNA	N
ATOM	5257	C6	URI	108	96.954	-13.943	13.406	1.00	34.45	BDNA	C
ATOM	5258	C2	URI	108	99.057	-14.146	12.249	1.00	33.66	BDNA	C
ATOM	5259	O2	URI	108	100.281	-14.214	12.228	1.00	28.52	BDNA	O
ATOM	5260	N3	URI	108	98.293	-14.193	11.106	1.00	28.95	BDNA	N
ATOM	5261	C4	URI	108	96.913	-14.132	11.024	1.00	27.32	BDNA	C
ATOM	5262	O4	URI	108	96.369	-14.252	9.932	1.00	25.04	BDNA	O
ATOM	5263	C5	URI	108	96.243	-13.995	12.276	1.00	28.49	BDNA	C
ATOM	5264	C2'	URI	108	98.474	-13.156	15.809	1.00	52.83	BDNA	C
ATOM	5265	C5'	URI	108	98.231	-16.103	17.324	1.00	61.26	BDNA	C
ATOM	5266	C4'	URI	108	99.268	-15.234	16.647	1.00	56.65	BDNA	C
ATOM	5267	O4'	URI	108	99.167	-15.303	15.202	1.00	53.43	BDNA	O
ATOM	5268	C1'	URI	108	99.088	-13.979	14.686	1.00	47.74	BDNA	C
ATOM	5269	C3'	URI	108	99.186	-13.751	17.013	1.00	56.22	BDNA	C
ATOM	5270	O3'	URI	108	100.501	-13.196	17.059	1.00	58.37	BDNA	O
ATOM	5271	P	URI	109	101.562	-13.701	18.157	1.00	59.77	BDNA	P
ATOM	5272	O1P	URI	109	101.586	-15.190	18.165	1.00	60.27	BDNA	O
ATOM	5273	O2P	URI	109	101.343	-12.961	19.422	1.00	59.72	BDNA	O
ATOM	5274	O5'	URI	109	102.926	-13.193	17.527	1.00	57.24	BDNA	O
ATOM	5275	N1	URI	109	101.409	-11.002	13.043	1.00	29.43	BDNA	N
ATOM	5276	C6	URI	109	100.357	-10.850	13.919	1.00	28.04	BDNA	C
ATOM	5277	C2	URI	109	101.192	-10.985	11.664	1.00	23.90	BDNA	C
ATOM	5278	O2	URI	109	102.086	-11.054	10.846	1.00	20.16	BDNA	O
ATOM	5279	N3	URI	109	99.879	-10.870	11.287	1.00	21.13	BDNA	N
ATOM	5280	C4	URI	109	98.778	-10.751	12.121	1.00	22.93	BDNA	C
ATOM	5281	O4	URI	109	97.643	-10.764	11.637	1.00	20.85	BDNA	O
ATOM	5282	C5	URI	109	99.086	-10.726	13.515	1.00	23.86	BDNA	C
ATOM	5283	C2'	URI	109	103.329	-9.989	14.265	1.00	42.36	BDNA	C
ATOM	5284	C5'	URI	109	102.988	-11.901	16.941	1.00	51.64	BDNA	C
ATOM	5285	C4'	URI	109	103.689	-11.952	15.605	1.00	46.56	BDNA	C
ATOM	5286	O4'	URI	109	102.770	-12.254	14.515	1.00	43.04	BDNA	O
ATOM	5287	C1'	URI	109	102.783	-11.202	13.542	1.00	37.83	BDNA	C
ATOM	5288	C3'	URI	109	104.278	-10.588	15.286	1.00	44.84	BDNA	C
ATOM	5289	O3'	URI	109	105.585	-10.743	14.775	1.00	47.19	BDNA	O
ATOM	5290	P	URI	110	106.517	-9.459	14.634	1.00	49.16	BDNA	P
ATOM	5291	O1P	URI	110	107.924	-9.842	14.948	1.00	47.80	BDNA	O
ATOM	5292	O2P	URI	110	105.852	-8.373	15.402	1.00	50.61	BDNA	O
ATOM	5293	O5'	URI	110	106.402	-9.140	13.084	1.00	47.28	BDNA	O
ATOM	5294	N1	URI	110	103.316	-7.804	10.460	1.00	25.63	BDNA	N
ATOM	5295	C6	URI	110	102.987	-7.537	11.771	1.00	21.01	BDNA	C
ATOM	5296	C2	URI	110	102.332	-7.828	9.471	1.00	23.46	BDNA	C
ATOM	5297	O2	URI	110	102.584	-8.005	8.290	1.00	22.81	BDNA	O
ATOM	5298	N3	URI	110	101.045	-7.636	9.918	1.00	17.23	BDNA	N
ATOM	5299	C4	URI	110	100.649	-7.413	11.216	1.00	15.98	BDNA	C
ATOM	5300	O4	URI	110	99.451	-7.377	11.471	1.00	12.82	BDNA	O
ATOM	5301	C5	URI	110	101.718	-7.349	12.173	1.00	17.20	BDNA	C
ATOM	5302	C2'	URI	110	105.818	-7.303	10.662	1.00	36.56	BDNA	C
ATOM	5303	C5'	URI	110	106.516	-10.189	12.131	1.00	43.69	BDNA	C
ATOM	5304	C4'	URI	110	106.355	-9.635	10.740	1.00	40.65	BDNA	C
ATOM	5305	O4'	URI	110	104.953	-9.469	10.414	1.00	36.98	BDNA	O
ATOM	5306	C1'	URI	110	104.694	-8.120	10.045	1.00	32.46	BDNA	C
ATOM	5307	C3'	URI	110	107.002	-8.262	10.585	1.00	41.18	BDNA	C
ATOM	5308	O3'	URI	110	107.704	-8.212	9.336	1.00	45.26	BDNA	O
ATOM	5309	P	CYT	111	108.735	-7.016	9.039	1.00	46.47	BDNA	P
ATOM	5310	O1P	CYT	111	108.767	-6.129	10.233	1.00	45.53	BDNA	O
ATOM	5311	O2P	CYT	111	109.993	-7.602	8.517	1.00	46.97	BDNA	O

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ATOM	5312	O5'	CYT	111	108.022	-6.248	7.852	1.00	43.44	BDNA O
ATOM	5313	N1	CYT	111	103.457	-4.490	7.593	1.00	31.84	BDNA N
ATOM	5314	C6	CYT	111	104.029	-4.083	8.767	1.00	29.65	BDNA C
ATOM	5315	C2	CYT	111	102.100	-4.791	7.547	1.00	29.34	BDNA C
ATOM	5316	O2	CYT	111	101.606	-5.147	6.471	1.00	29.49	BDNA O
ATOM	5317	N3	CYT	111	101.357	-4.688	8.676	1.00	26.03	BDNA N
ATOM	5318	C4	CYT	111	101.928	-4.307	9.816	1.00	24.37	BDNA C
ATOM	5319	N4	CYT	111	101.162	-4.233	10.907	1.00	22.49	BDNA N
ATOM	5320	C5	CYT	111	103.309	-3.986	9.892	1.00	26.12	BDNA C
ATOM	5321	C2'	CYT	111	105.479	-3.692	6.283	1.00	40.02	BDNA C
ATOM	5322	C5'	CYT	111	106.612	-6.289	7.743	1.00	42.39	BDNA C
ATOM	5323	C4'	CYT	111	106.195	-5.978	6.330	1.00	41.65	BDNA C
ATOM	5324	O4'	CYT	111	104.752	-5.957	6.306	1.00	41.72	BDNA O
ATOM	5325	C1'	CYT	111	104.263	-4.622	6.354	1.00	38.00	BDNA C
ATOM	5326	C3'	CYT	111	106.644	-4.591	5.896	1.00	41.76	BDNA C
ATOM	5327	O3'	CYT	111	106.981	-4.582	4.503	1.00	43.34	BDNA O
ATOM	5328	P	CYT	112	107.571	-3.244	3.836	1.00	45.53	BDNA P
ATOM	5329	O1P	CYT	112	108.385	-3.560	2.624	1.00	43.19	BDNA O
ATOM	5330	O2P	CYT	112	108.159	-2.394	4.910	1.00	44.90	BDNA O
ATOM	5331	O5'	CYT	112	106.248	-2.531	3.335	1.00	41.33	BDNA O
ATOM	5332	N1	CYT	112	103.244	-0.485	6.474	1.00	33.45	BDNA N
ATOM	5333	C6	CYT	112	104.189	-0.051	7.360	1.00	32.08	BDNA C
ATOM	5334	C2	CYT	112	102.148	-1.250	6.926	1.00	34.20	BDNA C
ATOM	5335	O2	CYT	112	101.364	-1.740	6.090	1.00	34.20	BDNA O
ATOM	5336	N3	CYT	112	101.983	-1.440	8.258	1.00	32.96	BDNA N
ATOM	5337	C4	CYT	112	102.899	-0.982	9.115	1.00	31.95	BDNA C
ATOM	5338	N4	CYT	112	102.690	-1.183	10.422	1.00	30.07	BDNA N
ATOM	5339	C5	CYT	112	104.068	-0.294	8.672	1.00	32.51	BDNA C
ATOM	5340	C2'	CYT	112	104.201	1.073	4.777	1.00	31.72	BDNA C
ATOM	5341	C5'	CYT	112	106.174	-1.137	3.335	1.00	38.17	BDNA C
ATOM	5342	C4'	CYT	112	104.742	-0.688	3.233	1.00	33.03	BDNA C
ATOM	5343	O4'	CYT	112	103.962	-1.213	4.338	1.00	34.52	BDNA O
ATOM	5344	C1'	CYT	112	103.339	-0.138	5.039	1.00	33.84	BDNA C
ATOM	5345	C3'	CYT	112	104.715	0.821	3.373	1.00	30.81	BDNA C
ATOM	5346	O3'	CYT	112	103.904	1.417	2.394	1.00	23.93	BDNA O
ATOM	5347	P	ADE	113	104.211	2.924	1.976	1.00	23.83	BDNA P
ATOM	5348	O1P	ADE	113	104.470	2.902	0.515	1.00	24.01	BDNA O
ATOM	5349	O2P	ADE	113	105.223	3.515	2.908	1.00	21.19	BDNA O
ATOM	5350	O5'	ADE	113	102.842	3.677	2.241	1.00	17.88	BDNA O
ATOM	5351	N9	ADE	113	99.640	5.434	6.401	1.00	4.43	BDNA N
ATOM	5352	C4	ADE	113	98.607	5.350	7.299	1.00	1.64	BDNA C
ATOM	5353	N3	ADE	113	97.310	5.157	7.028	1.00	2.17	BDNA N
ATOM	5354	C2	ADE	113	96.601	5.103	8.153	1.00	2.60	BDNA C
ATOM	5355	N1	ADE	113	97.011	5.218	9.419	1.00	1.00	BDNA N
ATOM	5356	C6	ADE	113	98.320	5.425	9.652	1.00	2.50	BDNA C
ATOM	5357	N6	ADE	113	98.730	5.566	10.916	1.00	1.00	BDNA N
ATOM	5358	C5	ADE	113	99.178	5.486	8.541	1.00	1.57	BDNA C
ATOM	5359	N7	ADE	113	100.545	5.669	8.432	1.00	7.22	BDNA N
ATOM	5360	C8	ADE	113	100.765	5.643	7.141	1.00	5.49	BDNA C
ATOM	5361	C2'	ADE	113	100.313	6.299	4.130	1.00	7.05	BDNA C
ATOM	5362	C5'	ADE	113	102.217	3.644	3.512	1.00	10.21	BDNA C
ATOM	5363	C4'	ADE	113	100.785	4.081	3.360	1.00	7.73	BDNA C
ATOM	5364	O4'	ADE	113	100.124	4.020	4.635	1.00	8.58	BDNA O
ATOM	5365	C1'	ADE	113	99.549	5.279	4.953	1.00	7.80	BDNA C
ATOM	5366	C3'	ADE	113	100.628	5.516	2.866	1.00	8.21	BDNA C
ATOM	5367	O3'	ADE	113	99.561	5.565	1.916	1.00	8.03	BDNA O
ATOM	5368	P	ADE	114	99.142	6.966	1.269	1.00	3.37	BDNA P
ATOM	5369	O1P	ADE	114	98.526	6.704	-0.051	1.00	2.69	BDNA O
ATOM	5370	O2P	ADE	114	100.314	7.868	1.368	1.00	3.29	BDNA O
ATOM	5371	O5'	ADE	114	98.016	7.482	2.260	1.00	4.24	BDNA O
ATOM	5372	N9	ADE	114	97.251	8.611	6.425	1.00	5.97	BDNA N
ATOM	5373	C4	ADE	114	96.889	8.529	7.745	1.00	1.00	BDNA C
ATOM	5374	N3	ADE	114	95.656	8.373	8.241	1.00	1.00	BDNA N

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ATOM	5375	C2	ADE	114	95.682	8.414	9.561	1.00	1.48	BDNA	C
ATOM	5376	N1	ADE	114	96.728	8.581	10.389	1.00	3.04	BDNA	N
ATOM	5377	C6	ADE	114	97.954	8.721	9.850	1.00	1.00	BDNA	C
ATOM	5378	N6	ADE	114	99.002	8.883	10.660	1.00	1.00	BDNA	N
ATOM	5379	C5	ADE	114	98.053	8.691	8.461	1.00	1.00	BDNA	C
ATOM	5380	N7	ADE	114	99.137	8.802	7.615	1.00	4.47	BDNA	N
ATOM	5381	C8	ADE	114	98.609	8.734	6.421	1.00	6.28	BDNA	C
ATOM	5382	C2'	ADE	114	96.726	9.600	4.164	1.00	7.82	BDNA	C
ATOM	5383	C5'	ADE	114	96.770	6.814	2.351	1.00	5.35	BDNA	C
ATOM	5384	C4'	ADE	114	95.861	7.561	3.292	1.00	7.82	BDNA	C
ATOM	5385	O4'	ADE	114	96.305	7.366	4.660	1.00	9.31	BDNA	O
ATOM	5386	C1'	ADE	114	96.343	8.641	5.277	1.00	8.93	BDNA	C
ATOM	5387	C3'	ADE	114	95.832	9.080	3.058	1.00	9.37	BDNA	C
ATOM	5388	O3'	ADE	114	94.524	9.586	3.328	1.00	13.20	BDNA	O
ATOM	5389	P	GUA	115	93.553	10.034	2.128	1.00	14.47	BDNA	P
ATOM	5390	O1P	GUA	115	93.321	8.879	1.203	1.00	11.83	BDNA	O
ATOM	5391	O2P	GUA	115	94.046	11.321	1.591	1.00	12.17	BDNA	O
ATOM	5392	O5'	GUA	115	92.217	10.354	2.922	1.00	10.21	BDNA	O
ATOM	5393	N9	GUA	115	94.107	11.102	7.669	1.00	2.34	BDNA	N
ATOM	5394	C4	GUA	115	94.596	11.425	8.920	1.00	1.00	BDNA	C
ATOM	5395	N3	GUA	115	93.885	11.478	10.066	1.00	1.02	BDNA	N
ATOM	5396	C2	GUA	115	94.643	11.797	11.102	1.00	1.00	BDNA	C
ATOM	5397	N2	GUA	115	94.106	11.888	12.325	1.00	3.05	BDNA	N
ATOM	5398	N1	GUA	115	95.980	12.049	11.020	1.00	1.00	BDNA	N
ATOM	5399	C6	GUA	115	96.726	12.014	9.854	1.00	1.00	BDNA	C
ATOM	5400	O6	GUA	115	97.937	12.268	9.893	1.00	1.00	BDNA	O
ATOM	5401	C5	GUA	115	95.927	11.669	8.736	1.00	1.00	BDNA	C
ATOM	5402	N7	GUA	115	96.274	11.501	7.412	1.00	1.00	BDNA	N
ATOM	5403	C8	GUA	115	95.167	11.157	6.821	1.00	1.00	BDNA	C
ATOM	5404	C2'	GUA	115	91.985	12.122	7.277	1.00	7.77	BDNA	C
ATOM	5405	C5'	GUA	115	92.216	11.387	3.892	1.00	7.88	BDNA	C
ATOM	5406	C4'	GUA	115	91.630	10.909	5.200	1.00	5.75	BDNA	C
ATOM	5407	O4'	GUA	115	92.698	10.305	5.984	1.00	6.94	BDNA	O
ATOM	5408	C1'	GUA	115	92.722	10.812	7.314	1.00	4.59	BDNA	C
ATOM	5409	C3'	GUA	115	91.179	12.121	5.998	1.00	7.93	BDNA	C
ATOM	5410	O3'	GUA	115	89.802	12.205	6.292	1.00	10.64	BDNA	O
ATOM	5411	P	THY	116	89.180	13.672	6.528	1.00	13.35	BDNA	P
ATOM	5412	O1P	THY	116	87.738	13.602	6.188	1.00	14.68	BDNA	O
ATOM	5413	O2P	THY	116	90.067	14.649	5.821	1.00	9.99	BDNA	O
ATOM	5414	O5'	THY	116	89.349	13.900	8.096	1.00	10.96	BDNA	O
ATOM	5415	N1	THY	116	92.386	14.736	10.841	1.00	4.84	BDNA	N
ATOM	5416	C6	THY	116	92.698	14.655	9.503	1.00	1.00	BDNA	C
ATOM	5417	C2	THY	116	93.366	14.980	11.791	1.00	1.00	BDNA	C
ATOM	5418	O2	THY	116	93.147	15.064	12.981	1.00	1.23	BDNA	O
ATOM	5419	N3	THY	116	94.621	15.129	11.288	1.00	1.00	BDNA	N
ATOM	5420	C4	THY	116	95.005	15.068	9.968	1.00	1.00	BDNA	C
ATOM	5421	O4	THY	116	96.182	15.258	9.663	1.00	1.73	BDNA	O
ATOM	5422	C5	THY	116	93.945	14.786	9.030	1.00	2.40	BDNA	C
ATOM	5423	C5A	THY	116	94.289	14.631	7.584	1.00	1.78	BDNA	C
ATOM	5424	C2'	THY	116	90.021	15.597	10.746	1.00	10.40	BDNA	C
ATOM	5425	C5'	THY	116	88.866	12.929	9.026	1.00	12.94	BDNA	C
ATOM	5426	C4'	THY	116	89.110	13.395	10.440	1.00	10.72	BDNA	C
ATOM	5427	O4'	THY	116	90.522	13.315	10.765	1.00	12.38	BDNA	O
ATOM	5428	C1'	THY	116	90.982	14.553	11.283	1.00	7.70	BDNA	C
ATOM	5429	C3'	THY	116	88.705	14.847	10.644	1.00	10.44	BDNA	C
ATOM	5430	O3'	THY	116	87.944	14.998	11.823	1.00	13.89	BDNA	O
ATOM	5431	P	CYT	117	87.066	16.316	12.007	1.00	15.87	BDNA	P
ATOM	5432	O1P	CYT	117	85.755	15.952	12.600	1.00	12.22	BDNA	O
ATOM	5433	O2P	CYT	117	87.125	17.011	10.709	1.00	17.40	BDNA	O
ATOM	5434	O5'	CYT	117	87.918	17.152	13.047	1.00	16.50	BDNA	O
ATOM	5435	N1	CYT	117	92.401	18.429	12.843	1.00	9.38	BDNA	N
ATOM	5436	C6	CYT	117	91.952	18.490	11.556	1.00	7.81	BDNA	C
ATOM	5437	C2	CYT	117	93.790	18.339	13.111	1.00	9.49	BDNA	C

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ATOM	5438	O2	CYT	117	94.187	18.325	14.288	1.00	7.65	BDNA	O
ATOM	5439	N3	CYT	117	94.656	18.272	12.077	1.00	9.32	BDNA	N
ATOM	5440	C4	CYT	117	94.198	18.291	10.821	1.00	9.67	BDNA	C
ATOM	5441	N4	CYT	117	95.089	18.190	9.834	1.00	8.15	BDNA	N
ATOM	5442	C5	CYT	117	92.805	18.411	10.523	1.00	7.72	BDNA	C
ATOM	5443	C2'	CYT	117	90.320	19.428	13.932	1.00	13.69	BDNA	C
ATOM	5444	C5'	CYT	117	88.481	16.489	14.169	1.00	18.65	BDNA	C
ATOM	5445	C4'	CYT	117	89.600	17.301	14.771	1.00	16.34	BDNA	C
ATOM	5446	O4'	CYT	117	90.835	17.168	14.030	1.00	14.78	BDNA	O
ATOM	5447	C1'	CYT	117	91.461	18.434	13.975	1.00	12.61	BDNA	C
ATOM	5448	C3'	CYT	117	89.335	18.797	14.910	1.00	17.80	BDNA	C
ATOM	5449	O3'	CYT	117	89.621	19.140	16.262	1.00	21.42	BDNA	O
ATOM	5450	P	THY	118	89.435	20.644	16.767	1.00	24.72	BDNA	P
ATOM	5451	O1P	THY	118	88.608	20.538	18.000	1.00	20.26	BDNA	O
ATOM	5452	O2P	THY	118	88.974	21.504	15.634	1.00	23.30	BDNA	O
ATOM	5453	O5'	THY	118	90.933	21.011	17.169	1.00	23.24	BDNA	O
ATOM	5454	N1	THY	118	94.726	21.882	15.186	1.00	11.47	BDNA	N
ATOM	5455	C6	THY	118	93.573	21.842	14.434	1.00	6.83	BDNA	C
ATOM	5456	C2	THY	118	95.965	22.018	14.588	1.00	9.62	BDNA	C
ATOM	5457	O2	THY	118	97.007	22.170	15.214	1.00	6.46	BDNA	O
ATOM	5458	N3	THY	118	95.935	21.989	13.213	1.00	6.01	BDNA	N
ATOM	5459	C4	THY	118	94.811	21.886	12.404	1.00	6.72	BDNA	C
ATOM	5460	O4	THY	118	94.929	21.813	11.180	1.00	5.80	BDNA	O
ATOM	5461	C5	THY	118	93.555	21.852	13.101	1.00	3.88	BDNA	C
ATOM	5462	C5A	THY	118	92.293	21.835	12.304	1.00	2.79	BDNA	C
ATOM	5463	C2'	THY	118	93.768	22.736	17.381	1.00	22.68	BDNA	C
ATOM	5464	C5'	THY	118	91.773	19.988	17.712	1.00	23.89	BDNA	C
ATOM	5465	C4'	THY	118	93.151	20.519	18.025	1.00	24.22	BDNA	C
ATOM	5466	O4'	THY	118	94.041	20.455	16.889	1.00	21.92	BDNA	O
ATOM	5467	C1'	THY	118	94.641	21.723	16.651	1.00	18.16	BDNA	C
ATOM	5468	C3'	THY	118	93.231	21.941	18.565	1.00	26.46	BDNA	C
ATOM	5469	O3'	THY	118	94.136	21.921	19.673	1.00	31.30	BDNA	O
ATOM	5470	P	THY	119	94.412	23.255	20.525	1.00	35.65	BDNA	P
ATOM	5471	O1P	THY	119	94.652	22.766	21.916	1.00	34.99	BDNA	O
ATOM	5472	O2P	THY	119	93.376	24.298	20.283	1.00	31.08	BDNA	O
ATOM	5473	O5'	THY	119	95.797	23.764	19.916	1.00	31.94	BDNA	O
ATOM	5474	N1	THY	119	97.183	25.114	15.935	1.00	10.47	BDNA	N
ATOM	5475	C6	THY	119	95.811	25.154	16.056	1.00	7.94	BDNA	C
ATOM	5476	C2	THY	119	97.790	25.232	14.701	1.00	6.52	BDNA	C
ATOM	5477	O2	THY	119	98.994	25.297	14.554	1.00	4.86	BDNA	O
ATOM	5478	N3	THY	119	96.934	25.283	13.638	1.00	4.74	BDNA	N
ATOM	5479	C4	THY	119	95.553	25.260	13.676	1.00	7.77	BDNA	C
ATOM	5480	O4	THY	119	94.904	25.239	12.621	1.00	3.02	BDNA	O
ATOM	5481	C5	THY	119	94.978	25.229	15.004	1.00	7.88	BDNA	C
ATOM	5482	C5A	THY	119	93.489	25.282	15.139	1.00	7.90	BDNA	C
ATOM	5483	C2'	THY	119	97.901	25.810	18.304	1.00	21.31	BDNA	C
ATOM	5484	C5'	THY	119	96.904	22.876	19.801	1.00	25.89	BDNA	C
ATOM	5485	C4'	THY	119	98.031	23.525	19.036	1.00	25.32	BDNA	C
ATOM	5486	O4'	THY	119	97.781	23.578	17.612	1.00	23.98	BDNA	O
ATOM	5487	C1'	THY	119	98.060	24.886	17.115	1.00	18.25	BDNA	C
ATOM	5488	C3'	THY	119	98.396	24.945	19.458	1.00	26.74	BDNA	C
ATOM	5489	O3'	THY	119	99.817	24.977	19.573	1.00	33.11	BDNA	O
ATOM	5490	P	THY	120	100.548	26.196	20.312	1.00	34.61	BDNA	P
ATOM	5491	O1P	THY	120	101.320	25.623	21.440	1.00	33.52	BDNA	O
ATOM	5492	O2P	THY	120	99.582	27.298	20.558	1.00	34.85	BDNA	O
ATOM	5493	O5'	THY	120	101.554	26.645	19.177	1.00	32.99	BDNA	O
ATOM	5494	N1	THY	120	100.566	28.178	14.589	1.00	23.61	BDNA	N
ATOM	5495	C6	THY	120	99.512	28.309	15.470	1.00	19.27	BDNA	C
ATOM	5496	C2	THY	120	100.365	28.245	13.226	1.00	21.33	BDNA	C
ATOM	5497	O2	THY	120	101.275	28.165	12.412	1.00	21.95	BDNA	O
ATOM	5498	N3	THY	120	99.053	28.397	12.847	1.00	17.59	BDNA	N
ATOM	5499	C4	THY	120	97.948	28.471	13.674	1.00	17.86	BDNA	C
ATOM	5500	O4	THY	120	96.817	28.531	13.194	1.00	16.22	BDNA	O

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ATOM	5501	C5	THY	120	98.232	28.440	15.084	1.00	18.17	BDNA	C
ATOM	5502	C5A	THY	120	97.088	28.543	16.045	1.00	16.20	BDNA	C
ATOM	5503	C2'	THY	120	102.427	28.821	16.209	1.00	33.10	BDNA	C
ATOM	5504	C5'	THY	120	101.208	26.411	17.823	1.00	33.06	BDNA	C
ATOM	5505	C4'	THY	120	102.426	26.545	16.952	1.00	33.70	BDNA	C
ATOM	5506	O4'	THY	120	101.965	26.577	15.584	1.00	34.35	BDNA	O
ATOM	5507	C1'	THY	120	101.946	27.915	15.079	1.00	30.38	BDNA	C
ATOM	5508	C3'	THY	120	103.130	27.874	17.174	1.00	35.36	BDNA	C
ATOM	5509	O3'	THY	120	104.532	27.708	16.958	1.00	38.29	BDNA	O
ATOM	5510	P	THY	121	105.440	28.979	16.586	1.00	41.49	BDNA	P
ATOM	5511	O1P	THY	121	106.793	28.760	17.160	1.00	42.66	BDNA	O
ATOM	5512	O2P	THY	121	104.709	30.239	16.897	1.00	40.00	BDNA	O
ATOM	5513	O5'	THY	121	105.563	28.838	15.010	1.00	40.94	BDNA	O
ATOM	5514	N1	THY	121	102.284	31.004	12.509	1.00	27.77	BDNA	N
ATOM	5515	C6	THY	121	102.169	31.249	13.860	1.00	23.49	BDNA	C
ATOM	5516	C2	THY	121	101.192	31.096	11.673	1.00	24.97	BDNA	C
ATOM	5517	O2	THY	121	101.249	30.911	10.465	1.00	24.10	BDNA	O
ATOM	5518	N3	THY	121	100.020	31.412	12.302	1.00	21.43	BDNA	N
ATOM	5519	C4	THY	121	99.829	31.641	13.648	1.00	21.41	BDNA	C
ATOM	5520	O4	THY	121	98.701	31.886	14.075	1.00	19.33	BDNA	O
ATOM	5521	C5	THY	121	101.014	31.555	14.460	1.00	20.31	BDNA	C
ATOM	5522	C5A	THY	121	100.896	31.806	15.928	1.00	20.80	BDNA	C
ATOM	5523	C2'	THY	121	104.599	31.735	11.889	1.00	40.13	BDNA	C
ATOM	5524	C5'	THY	121	106.024	29.912	14.235	1.00	41.92	BDNA	C
ATOM	5525	C4'	THY	121	105.591	29.747	12.802	1.00	41.19	BDNA	C
ATOM	5526	O4'	THY	121	104.151	29.583	12.721	1.00	37.79	BDNA	O
ATOM	5527	C1'	THY	121	103.583	30.614	11.915	1.00	34.66	BDNA	C
ATOM	5528	C3'	THY	121	105.923	31.004	12.012	1.00	43.64	BDNA	C
ATOM	5529	O3'	THY	121	106.491	30.691	10.753	1.00	48.58	BDNA	O
ATOM	5530	P	THY	122	107.477	31.748	10.070	1.00	53.21	BDNA	P
ATOM	5531	O1P	THY	122	108.509	30.967	9.340	1.00	52.29	BDNA	O
ATOM	5532	O2P	THY	122	107.888	32.721	11.120	1.00	51.54	BDNA	O
ATOM	5533	O5'	THY	122	106.533	32.493	9.023	1.00	53.71	BDNA	O
ATOM	5534	N1	THY	122	102.472	34.105	9.563	1.00	41.60	BDNA	N
ATOM	5535	C6	THY	122	103.227	34.135	10.712	1.00	39.07	BDNA	C
ATOM	5536	C2	THY	122	101.090	34.224	9.609	1.00	39.14	BDNA	C
ATOM	5537	O2	THY	122	100.373	34.180	8.624	1.00	36.88	BDNA	O
ATOM	5538	N3	THY	122	100.575	34.393	10.870	1.00	36.63	BDNA	N
ATOM	5539	C4	THY	122	101.280	34.446	12.059	1.00	36.66	BDNA	C
ATOM	5540	O4	THY	122	100.683	34.625	13.118	1.00	33.98	BDNA	O
ATOM	5541	C5	THY	122	102.711	34.290	11.936	1.00	37.44	BDNA	C
ATOM	5542	C5A	THY	122	103.550	34.303	13.173	1.00	38.90	BDNA	C
ATOM	5543	C2'	THY	122	104.397	34.793	8.087	1.00	51.77	BDNA	C
ATOM	5544	C5'	THY	122	105.897	31.753	7.980	1.00	53.59	BDNA	C
ATOM	5545	C4'	THY	122	104.797	32.567	7.336	1.00	53.51	BDNA	C
ATOM	5546	O4'	THY	122	103.601	32.610	8.158	1.00	52.01	BDNA	O
ATOM	5547	C1'	THY	122	103.147	33.949	8.260	1.00	46.96	BDNA	C
ATOM	5548	C3'	THY	122	105.148	34.018	7.016	1.00	53.46	BDNA	C
ATOM	5549	O3'	THY	122	104.588	34.334	5.733	1.00	55.95	BDNA	O
TER	5550		THY	122						BDNA	
ATOM	5551	C1	M38	990	95.547	1.854	9.931	1.00	14.85	M38	C
ATOM	5552	C2	M38	990	94.268	1.790	10.468	1.00	15.13	M38	C
ATOM	5553	C3	M38	990	94.086	1.840	11.862	1.00	16.62	M38	C
ATOM	5554	C4	M38	990	95.161	1.951	12.714	1.00	16.81	M38	C
ATOM	5555	C5	M38	990	96.485	2.015	12.195	1.00	17.82	M38	C
ATOM	5556	C6	M38	990	96.664	1.974	10.788	1.00	14.65	M38	C
ATOM	5557	C7	M38	990	97.952	2.031	10.259	1.00	15.34	M38	C
ATOM	5558	C8	M38	990	99.005	2.168	11.116	1.00	18.49	M38	C
ATOM	5559	C9	M38	990	97.709	2.139	12.877	1.00	22.73	M38	C
ATOM	5560	N10	M38	990	98.901	2.208	12.616	1.00	24.56	M38	N
ATOM	5561	C11	M38	990	98.385	2.005	8.621	1.00	16.62	M38	C
ATOM	5562	C12	M38	990	99.834	2.139	8.699	1.00	14.75	M38	C
ATOM	5563	C13	M38	990	100.198	2.201	10.012	1.00	15.87	M38	C





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## FIGURE 5

Form 11. Coordinates for the crystal structure of  
 REMARK human topoisomerase I (topo70) in covalent complex with 22mer  
 REMARK duplex DNA and the DNA minor groove binding compound  
 REMARK Hoechst-33342

CRYST1	267.971	57.654	71.269	90.00	90.00	90.00	P1
ORIGX1	1.000000	0.000000	0.000000			0.000000	
ORIGX2	0.000000	1.000000	0.000000			0.000000	
ORIGX3	0.000000	0.000000	1.000000			0.000000	
SCALE1	0.003732	-8.304720	0.006266			0.000000	
SCALE2	0.000000	38.599648	0.000000			0.000000	
SCALE3	0.000000	0.000000	-0.027421			0.000000	
ATOM	1	CB	ALA	A	201	25.822 -11.798 44.418	1.00 25.45
ATOM	2	C	ALA	A	201	28.302 -12.253 44.573	1.00 30.14
ATOM	3	O	ALA	A	201	29.248 -13.043 44.662	1.00 33.40
ATOM	4	N	ALA	A	201	26.850 -12.420 46.597	1.00 32.62
ATOM	5	CA	ALA	A	201	26.921 -12.600 45.117	1.00 31.02
ATOM	6	N	ALA	A	202	28.437 -11.053 44.023	1.00 24.57
ATOM	7	CA	ALA	A	202	29.674 -10.590 43.410	1.00 19.84
ATOM	8	CB	ALA	A	202	30.880 -10.761 44.309	1.00 22.51
ATOM	9	C	ALA	A	202	29.865 -11.350 42.094	1.00 21.55
ATOM	10	O	ALA	A	202	30.040 -12.573 42.108	1.00 27.89
ATOM	11	N	TRP	A	203	29.776 -10.623 40.980	1.00 11.16
ATOM	12	CA	TRP	A	203	29.929 -11.279 39.685	1.00 6.10
ATOM	13	CB	TRP	A	203	28.780 -10.935 38.743	1.00 7.05
ATOM	14	CG	TRP	A	203	28.986 -11.350 37.317	1.00 2.00
ATOM	15	CD2	TRP	A	203	28.747 -10.547 36.153	1.00 2.00
ATOM	16	CE2	TRP	A	203	29.056 -11.337 35.029	1.00 4.96
ATOM	17	CE3	TRP	A	203	28.302 -9.236 35.953	1.00 2.00
ATOM	18	CD1	TRP	A	203	29.410 -12.571 36.866	1.00 2.00
ATOM	19	NE1	TRP	A	203	29.464 -12.563 35.491	1.00 12.80
ATOM	20	CZ2	TRP	A	203	28.948 -10.864 33.724	1.00 2.00
ATOM	21	CZ3	TRP	A	203	28.195 -8.769 34.654	1.00 2.00
ATOM	22	CH2	TRP	A	203	28.516 -9.578 33.556	1.00 6.04
ATOM	23	C	TRP	A	203	31.262 -10.923 39.042	1.00 12.10
ATOM	24	O	TRP	A	203	31.547 -9.759 38.760	1.00 24.18
ATOM	25	N	LYS	A	204	32.050 -11.963 38.790	1.00 9.27
ATOM	26	CA	LYS	A	204	33.341 -11.772 38.132	1.00 2.00
ATOM	27	CB	LYS	A	204	34.350 -12.829 38.566	1.00 11.26
ATOM	28	CG	LYS	A	204	34.386 -13.143 40.050	1.00 14.52
ATOM	29	CD	LYS	A	204	35.732 -13.707 40.500	1.00 19.97
ATOM	30	CE	LYS	A	204	35.652 -14.200 41.938	1.00 26.72
ATOM	31	NZ	LYS	A	204	36.927 -14.096 42.701	1.00 16.02
ATOM	32	C	LYS	A	204	33.104 -11.779 36.622	1.00 2.00
ATOM	33	O	LYS	A	204	33.138 -12.820 35.965	1.00 2.00
ATOM	34	N	TRP	A	205	32.840 -10.600 36.061	1.00 2.00
ATOM	35	CA	TRP	A	205	32.594 -10.440 34.637	1.00 5.38
ATOM	36	CB	TRP	A	205	31.869 -9.112 34.372	1.00 6.82
ATOM	37	CG	TRP	A	205	32.592 -7.914 34.910	1.00 3.09
ATOM	38	CD2	TRP	A	205	33.668 -7.209 34.282	1.00 5.93
ATOM	39	CE2	TRP	A	205	34.036 -6.164 35.148	1.00 11.93
ATOM	40	CE3	TRP	A	205	34.354 -7.360 33.074	1.00 13.50
ATOM	41	CD1	TRP	A	205	32.356 -7.287 36.100	1.00 2.00
ATOM	42	NE1	TRP	A	205	33.221 -6.233 36.251	1.00 11.45
ATOM	43	CZ2	TRP	A	205	35.065 -5.272 34.847	1.00 16.29
ATOM	44	CZ3	TRP	A	205	35.373 -6.474 32.775	1.00 21.17
ATOM	45	CH2	TRP	A	205	35.722 -5.456 33.670	1.00 15.33
ATOM	46	C	TRP	A	205	33.864 -10.495 33.804	1.00 5.32
ATOM	47	O	TRP	A	205	33.835 -10.829 32.619	1.00 5.28
ATOM	48	N	TRP	A	206	35.009 -10.181 34.400	1.00 12.60

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ATOM	49	CA	TRP	A	206	36.306	-10.180	33.742	1.00	10.25
ATOM	50	CB	TRP	A	206	37.328	-9.461	34.624	1.00	2.00
ATOM	51	CG	TRP	A	206	37.276	-9.913	36.052	1.00	6.63
ATOM	52	CD2	TRP	A	206	36.567	-9.291	37.128	1.00	6.23
ATOM	53	CE2	TRP	A	206	36.815	-10.050	38.285	1.00	13.00
ATCM	54	CE3	TRP	A	206	35.752	-8.164	37.231	1.00	8.91
ATOM	55	CD1	TRP	A	206	37.902	-11.000	36.580	1.00	2.00
ATOM	56	NE1	TRP	A	206	37.632	-11.090	37.924	1.00	19.13
ATOM	57	CZ2	TRP	A	206	36.279	-9.726	39.530	1.00	16.21
ATOM	58	CZ3	TRP	A	206	35.223	-7.832	38.461	1.00	12.29
ATOM	59	CH2	TRP	A	206	35.486	-8.613	39.593	1.00	17.51
ATOM	60	C	TRP	A	206	36.812	-11.564	33.369	1.00	9.24
ATOM	61	O	TRP	A	206	37.683	-11.704	32.505	1.00	21.81
ATOM	62	N	GLU	A	207	36.262	-12.615	33.959	1.00	6.91
ATOM	63	CA	GLU	A	207	36.618	-13.987	33.621	1.00	4.76
ATOM	64	CB	GLU	A	207	36.483	-14.888	34.847	1.00	2.00
ATOM	65	CG	GLU	A	207	37.315	-14.384	36.023	1.00	11.34
ATOM	66	CD	GLU	A	207	37.654	-15.449	37.043	1.00	20.96
ATOM	67	OE1	GLU	A	207	36.836	-16.369	37.274	1.00	22.56
ATOM	68	OE2	GLU	A	207	38.766	-15.364	37.617	1.00	23.87
ATOM	69	C	GLU	A	207	35.767	-14.438	32.441	1.00	12.07
ATOM	70	O	GLU	A	207	36.128	-15.343	31.687	1.00	18.32
ATOM	71	N	GLU	A	208	34.634	-13.766	32.229	1.00	22.15
ATOM	72	CA	GLU	A	208	33.738	-14.057	31.121	1.00	23.23
ATOM	73	CB	GLU	A	208	32.469	-13.205	31.150	1.00	24.70
ATOM	74	CG	GLU	A	208	31.682	-13.233	32.443	1.00	27.58
ATOM	75	CD	GLU	A	208	30.840	-14.478	32.626	1.00	21.74
ATOM	76	OE1	GLU	A	208	30.774	-15.298	31.686	1.00	20.86
ATOM	77	OE2	GLU	A	208	30.248	-14.619	33.717	1.00	17.82
ATOM	78	C	GLU	A	208	34.406	-13.768	29.774	1.00	19.47
ATOM	79	O	GLU	A	208	35.199	-12.839	29.663	1.00	24.17
ATOM	80	N	GLU	A	209	34.024	-14.536	28.768	1.00	18.39
ATOM	81	CA	GLU	A	209	34.553	-14.384	27.414	1.00	15.42
ATOM	82	CB	GLU	A	209	33.966	-15.485	26.540	1.00	11.11
ATOM	83	CG	GLU	A	209	34.279	-15.422	25.062	1.00	19.20
ATOM	84	CD	GLU	A	209	33.568	-16.515	24.280	1.00	29.11
ATOM	85	OE1	GLU	A	209	33.202	-16.258	23.109	1.00	26.93
ATOM	86	OE2	GLU	A	209	33.373	-17.622	24.834	1.00	30.69
ATOM	87	C	GLU	A	209	34.228	-12.998	26.871	1.00	17.05
ATOM	88	O	GLU	A	209	33.060	-12.628	26.764	1.00	16.30
ATOM	89	N	ARG	A	210	35.259	-12.223	26.551	1.00	24.49
ATOM	90	CA	ARG	A	210	35.079	-10.862	26.067	1.00	30.86
ATOM	91	CB	ARG	A	210	36.312	-10.335	25.322	1.00	34.35
ATOM	92	CG	ARG	A	210	37.371	-9.788	26.268	1.00	35.19
ATOM	93	CD	ARG	A	210	37.917	-8.439	25.834	1.00	36.42
ATOM	94	NE	ARG	A	210	38.744	-8.488	24.644	1.00	34.08
ATOM	95	CZ	ARG	A	210	38.414	-8.187	23.399	1.00	32.63
ATOM	96	NH1	ARG	A	210	39.336	-8.312	22.447	1.00	31.11
ATOM	97	NH2	ARG	A	210	37.204	-7.754	23.074	1.00	33.21
ATOM	98	C	ARG	A	210	33.832	-10.705	25.204	1.00	26.75
ATOM	99	O	ARG	A	210	33.536	-11.520	24.334	1.00	28.00
ATOM	100	N	TYR	A	211	33.094	-9.632	25.477	1.00	26.52
ATOM	101	CA	TYR	A	211	31.862	-9.360	24.747	1.00	28.71
ATOM	102	CB	TYR	A	211	31.102	-8.194	25.389	1.00	26.62
ATOM	103	CG	TYR	A	211	29.610	-8.461	25.427	1.00	26.30
ATOM	104	CD1	TYR	A	211	28.775	-8.047	24.399	1.00	27.28
ATOM	105	CE1	TYR	A	211	27.418	-8.301	24.431	1.00	23.89
ATOM	106	CD2	TYR	A	211	29.051	-9.148	26.496	1.00	29.34
ATOM	107	CE2	TYR	A	211	27.690	-9.401	26.543	1.00	34.95
ATOM	108	CZ	TYR	A	211	26.883	-8.977	25.507	1.00	32.46
ATOM	109	OH	TYR	A	211	25.531	-9.227	25.546	1.00	35.31
ATOM	110	C	TYR	A	211	32.157	-9.074	23.279	1.00	33.91
ATOM	111	O	TYR	A	211	33.078	-8.332	22.936	1.00	41.97

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ATOM	112	N	PRO A 212	31.365	-9.677	22.399	1.00	30.81
ATOM	113	CD	PRO A 212	30.251	-10.598	22.747	1.00	31.22
ATOM	114	CA	PRO A 212	31.487	-9.533	20.965	1.00	28.73
ATOM	115	CB	PRO A 212	30.291	-10.278	20.383	1.00	28.71
ATOM	116	CG	PRO A 212	29.370	-10.531	21.526	1.00	29.31
ATOM	117	C	PRO A 212	31.500	-8.094	20.471	1.00	29.83
ATOM	118	O	PRO A 212	31.265	-7.147	21.225	1.00	26.93
ATOM	119	N	GLU A 213	31.786	-7.954	19.173	1.00	27.76
ATOM	120	CA	GLU A 213	31.868	-6.628	18.571	1.00	29.00
ATOM	121	CB	GLU A 213	32.899	-6.588	17.447	1.00	36.31
ATOM	122	CG	GLU A 213	33.429	-5.211	17.097	1.00	44.68
ATOM	123	CD	GLU A 213	32.549	-4.381	16.188	1.00	48.34
ATOM	124	OE1	GLU A 213	32.233	-3.222	16.545	1.00	49.92
ATOM	125	OE2	GLU A 213	32.165	-4.863	15.100	1.00	47.75
ATOM	126	C	GLU A 213	30.502	-6.187	18.061	1.00	27.87
ATOM	127	O	GLU A 213	29.756	-6.974	17.482	1.00	32.73
ATOM	128	N	GLY A 214	30.213	-4.913	18.306	1.00	22.25
ATOM	129	CA	GLY A 214	28.954	-4.327	17.868	1.00	21.33
ATOM	130	C	GLY A 214	27.896	-4.428	18.960	1.00	17.15
ATOM	131	O	GLY A 214	27.635	-3.443	19.653	1.00	20.17
ATOM	132	N	ILE A 215	27.299	-5.611	19.109	1.00	2.00
ATOM	133	CA	ILE A 215	26.252	-5.768	20.110	1.00	13.07
ATOM	134	CB	ILE A 215	25.632	-7.176	20.036	1.00	13.64
ATOM	135	CG2	ILE A 215	24.688	-7.401	21.204	1.00	15.62
ATOM	136	CG1	ILE A 215	24.900	-7.329	18.699	1.00	24.95
ATOM	137	CD1	ILE A 215	24.076	-8.586	18.528	1.00	27.75
ATOM	138	C	ILE A 215	26.748	-5.433	21.509	1.00	11.00
ATOM	139	O	ILE A 215	27.664	-6.058	22.035	1.00	7.50
ATOM	140	N	LYS A 216	26.116	-4.440	22.129	1.00	10.06
ATOM	141	CA	LYS A 216	26.419	-4.039	23.492	1.00	10.32
ATOM	142	CB	LYS A 216	26.009	-2.592	23.766	1.00	10.39
ATOM	143	CG	LYS A 216	26.725	-1.543	22.938	1.00	11.29
ATOM	144	CD	LYS A 216	28.149	-1.309	23.412	1.00	2.00
ATOM	145	CE	LYS A 216	28.855	-0.311	22.509	1.00	4.73
ATOM	146	NZ	LYS A 216	30.156	0.123	23.102	1.00	10.61
ATOM	147	C	LYS A 216	25.680	-4.937	24.488	1.00	17.60
ATOM	148	O	LYS A 216	26.229	-5.302	25.532	1.00	22.22
ATOM	149	N	TRP A 217	24.427	-5.279	24.171	1.00	11.88
ATOM	150	CA	TRP A 217	23.644	-6.133	25.057	1.00	13.17
ATOM	151	CB	TRP A 217	22.988	-5.284	26.149	1.00	14.14
ATOM	152	CG	TRP A 217	22.270	-4.079	25.623	1.00	15.93
ATOM	153	CD2	TRP A 217	20.957	-4.040	25.059	1.00	13.91
ATOM	154	CE2	TRP A 217	20.696	-2.705	24.695	1.00	13.47
ATOM	155	CE3	TRP A 217	19.972	-5.000	24.825	1.00	17.97
ATOM	156	CD1	TRP A 217	22.740	-2.796	25.574	1.00	19.13
ATOM	157	NE1	TRP A 217	21.798	-1.963	25.023	1.00	16.86
ATOM	158	C12	TRP A 217	19.487	-2.322	24.122	1.00	12.70
ATOM	159	CZ3	TRP A 217	18.775	-4.618	24.244	1.00	15.29
ATOM	160	CH2	TRP A 217	18.546	-3.281	23.889	1.00	2.00
ATOM	161	C	TRP A 217	22.581	-6.954	24.342	1.00	14.61
ATOM	162	O	TRP A 217	22.289	-6.747	23.167	1.00	25.86
ATOM	163	N	LYS A 218	21.993	-7.910	25.057	1.00	12.94
ATOM	164	CA	LYS A 218	20.943	-8.763	24.508	1.00	15.04
ATOM	165	CB	LYS A 218	21.344	-10.234	24.567	1.00	20.30
ATOM	166	CG	LYS A 218	22.486	-10.624	23.644	1.00	27.48
ATOM	167	CD	LYS A 218	23.020	-12.015	23.947	1.00	29.05
ATOM	168	CE	LYS A 218	24.130	-12.006	24.984	1.00	29.02
ATOM	169	NZ	LYS A 218	25.460	-11.636	24.419	1.00	15.59
ATOM	170	C	LYS A 218	19.628	-8.529	25.254	1.00	17.18
ATOM	171	O	LYS A 218	18.541	-8.594	24.687	1.00	20.83
ATOM	172	N	PHE A 219	19.741	-8.170	26.533	1.00	13.84
ATOM	173	CA	PHE A 219	18.591	-7.887	27.382	1.00	2.00
ATOM	174	CB	PHE A 219	18.249	-9.127	28.211	1.00	2.00

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ATOM	175	CG	PHE	A	219	17.001	-9.018	29.046	1.00	2.00
ATOM	176	CD1	PHE	A	219	15.785	-9.404	28.518	1.00	6.68
ATOM	177	CD2	PHE	A	219	17.046	-8.559	30.346	1.00	2.00
ATOM	178	CE1	PHE	A	219	14.627	-9.323	29.262	1.00	10.42
ATOM	179	CE2	PHE	A	219	15.896	-8.478	31.105	1.00	9.85
ATOM	180	CZ	PHE	A	219	14.688	-8.856	30.562	1.00	14.61
ATOM	181	C	PHE	A	219	18.840	-6.711	28.322	1.00	7.43
ATOM	182	O	PHE	A	219	19.840	-6.659	29.046	1.00	2.00
ATOM	183	N	LEU	A	220	17.910	-5.763	28.355	1.00	4.64
ATOM	184	CA	LEU	A	220	18.020	-4.600	29.244	1.00	2.00
ATOM	185	CB	LEU	A	220	18.632	-3.413	28.520	1.00	2.00
ATOM	186	CG	LEU	A	220	18.355	-2.014	29.073	1.00	2.00
ATOM	187	CD1	LEU	A	220	19.203	-1.722	30.298	1.00	2.00
ATOM	188	CD2	LEU	A	220	18.621	-0.961	28.005	1.00	10.45
ATOM	189	C	LEU	A	220	16.628	-4.302	29.800	1.00	5.08
ATOM	190	O	LEU	A	220	15.652	-4.403	29.052	1.00	2.00
ATOM	191	N	GLU	A	221	16.508	-4.011	31.094	1.00	2.00
ATOM	192	CA	GLU	A	221	15.201	-3.735	31.680	1.00	2.00
ATOM	193	CB	GLU	A	221	14.465	-5.013	32.112	1.00	2.00
ATOM	194	CG	GLU	A	221	13.081	-4.741	32.677	1.00	2.00
ATOM	195	CD	GLU	A	221	12.359	-5.917	33.287	1.00	3.47
ATOM	196	OE1	GLU	A	221	11.955	-6.835	32.547	1.00	7.18
ATOM	197	OE2	GLU	A	221	12.161	-5.951	34.524	1.00	2.00
ATOM	198	C	GLU	A	221	15.309	-2.812	32.888	1.00	6.74
ATOM	199	O	GLU	A	221	15.839	-3.239	33.916	1.00	15.69
ATOM	200	N	HIS	A	222	14.767	-1.599	32.796	1.00	4.67
ATOM	201	CA	HIS	A	222	14.859	-0.669	33.923	1.00	8.91
ATOM	202	CB	HIS	A	222	15.956	0.366	33.619	1.00	2.00
ATOM	203	CG	HIS	A	222	15.894	0.959	32.249	1.00	4.98
ATOM	204	CD2	HIS	A	222	16.397	0.571	31.055	1.00	2.00
ATOM	205	ND1	HIS	A	222	15.231	2.143	32.018	1.00	5.28
ATOM	206	CE1	HIS	A	222	15.331	2.452	30.733	1.00	12.56
ATOM	207	NE2	HIS	A	222	16.036	1.513	30.118	1.00	2.00
ATOM	208	C	HIS	A	222	13.569	0.063	34.247	1.00	8.95
ATOM	209	O	HIS	A	222	12.677	0.155	33.404	1.00	15.69
ATOM	210	N	LYS	A	223	13.480	0.669	35.433	1.00	2.00
ATOM	211	CA	LYS	A	223	12.331	1.465	35.825	1.00	2.00
ATOM	212	CB	LYS	A	223	12.180	1.547	37.348	1.00	8.39
ATOM	213	CG	LYS	A	223	11.553	0.337	38.011	1.00	19.13
ATOM	214	CD	LYS	A	223	10.077	0.221	37.658	1.00	29.97
ATOM	215	CE	LYS	A	223	9.450	-1.049	38.214	1.00	38.34
ATOM	216	NZ	LYS	A	223	8.083	-1.266	37.647	1.00	40.43
ATOM	217	C	LYS	A	223	12.375	2.892	35.280	1.00	2.00
ATOM	218	O	LYS	A	223	11.452	3.674	35.535	1.00	12.69
ATOM	219	N	GLY	A	224	13.420	3.269	34.552	1.00	11.79
ATOM	220	CA	GLY	A	224	13.527	4.592	33.958	1.00	14.78
ATOM	221	C	GLY	A	224	13.911	5.665	34.969	1.00	12.67
ATOM	222	O	GLY	A	224	14.212	5.362	36.123	1.00	13.47
ATOM	223	N	PRO	A	225	13.893	6.925	34.536	1.00	2.60
ATOM	224	CD	PRO	A	225	13.550	7.312	33.141	1.00	5.62
ATOM	225	CA	PRO	A	225	14.265	8.059	35.339	1.00	5.60
ATOM	226	CB	PRO	A	225	14.094	9.256	34.393	1.00	2.85
ATOM	227	CG	PRO	A	225	14.101	8.704	33.019	1.00	2.00
ATOM	228	C	PRO	A	225	13.444	8.364	36.575	1.00	2.00
ATOM	229	O	PRO	A	225	12.288	7.972	36.699	1.00	2.00
ATOM	230	N	VAL	A	226	14.038	9.132	37.486	1.00	2.00
ATOM	231	CA	VAL	A	226	13.362	9.610	38.687	1.00	2.00
ATOM	232	CB	VAL	A	226	14.072	9.221	39.985	1.00	2.00
ATOM	233	CG1	VAL	A	226	13.515	9.932	41.211	1.00	4.91
ATOM	234	CG2	VAL	A	226	13.957	7.715	40.188	1.00	2.00
ATOM	235	C	VAL	A	226	13.266	11.134	38.580	1.00	6.15
ATOM	236	O	VAL	A	226	14.242	11.829	38.857	1.00	2.00
ATOM	237	N	PHE	A	227	12.111	11.628	38.143	1.00	3.93

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ATOM	238	CA	PHE	A	227	11.952	13.063	37.962	1.00	2.00
ATOM	239	CB	PHE	A	227	10.677	13.379	37.183	1.00	2.00
ATOM	240	CG	PHE	A	227	10.625	12.779	35.805	1.00	2.00
ATOM	241	CD1	PHE	A	227	11.007	13.522	34.716	1.00	2.00
ATOM	242	CD2	PHE	A	227	10.256	11.458	35.633	1.00	2.00
ATOM	243	CE1	PHE	A	227	10.957	12.963	33.447	1.00	5.77
ATOM	244	CE2	PHE	A	227	10.206	10.895	34.372	1.00	4.51
ATOM	245	CZ	PHE	A	227	10.566	11.651	33.271	1.00	2.00
ATOM	246	C	PHE	A	227	11.956	13.849	39.269	1.00	2.00
ATOM	247	O	PHE	A	227	11.455	13.410	40.297	1.00	2.00
ATOM	248	N	ALA	A	228	12.506	15.060	39.194	1.00	5.74
ATOM	249	CA	ALA	A	228	12.578	15.979	40.321	1.00	7.88
ATOM	250	CB	ALA	A	228	13.307	17.247	39.897	1.00	9.42
ATOM	251	C	ALA	A	228	11.177	16.349	40.801	1.00	2.00
ATOM	252	O	ALA	A	228	10.254	16.388	39.991	1.00	2.00
ATOM	253	N	PRO	A	229	11.029	16.606	42.093	1.00	3.71
ATOM	254	CD	PRO	A	229	12.119	16.579	43.093	1.00	4.34
ATOM	255	CA	PRO	A	229	9.747	16.970	42.665	1.00	6.32
ATOM	256	CB	PRO	A	229	10.021	17.166	44.145	1.00	6.70
ATOM	257	CG	PRO	A	229	11.442	16.844	44.401	1.00	2.00
ATOM	258	C	PRO	A	229	9.173	18.236	42.048	1.00	10.20
ATOM	259	O	PRO	A	229	9.882	19.071	41.476	1.00	19.32
ATOM	260	N	PRO	A	230	7.858	18.392	42.145	1.00	6.60
ATOM	261	CD	PRO	A	230	6.919	17.456	42.806	1.00	9.81
ATOM	262	CA	PRO	A	230	7.171	19.557	41.611	1.00	2.00
ATOM	263	CB	PRO	A	230	5.701	19.191	41.671	1.00	2.00
ATOM	264	CG	PRO	A	230	5.603	18.189	42.767	1.00	10.90
ATOM	265	C	PRO	A	230	7.517	20.787	42.433	1.00	5.80
ATOM	266	O	PRO	A	230	7.768	20.707	43.633	1.00	2.00
ATOM	267	N	TYR	A	231	7.591	21.932	41.776	1.00	11.54
ATOM	268	CA	TYR	A	231	7.966	23.187	42.410	1.00	13.41
ATOM	269	CB	TYR	A	231	8.155	24.231	41.311	1.00	19.37
ATOM	270	CG	TYR	A	231	8.224	25.661	41.789	1.00	24.40
ATOM	271	CD1	TYR	A	231	9.349	26.148	42.434	1.00	24.04
ATOM	272	CE1	TYR	A	231	9.406	27.460	42.866	1.00	25.77
ATOM	273	CD2	TYR	A	231	7.154	26.523	41.587	1.00	27.76
ATOM	274	CE2	TYR	A	231	7.208	27.837	42.014	1.00	27.29
ATOM	275	CZ	TYR	A	231	8.336	28.299	42.654	1.00	22.62
ATOM	276	OH	TYR	A	231	8.395	29.607	43.073	1.00	20.64
ATOM	277	C	TYR	A	231	6.933	23.654	43.421	1.00	21.13
ATOM	278	O	TYR	A	231	5.738	23.699	43.126	1.00	31.29
ATOM	279	N	GLU	A	232	7.389	24.026	44.610	1.00	19.67
ATOM	280	CA	GLU	A	232	6.501	24.518	45.660	1.00	16.18
ATOM	281	CB	GLU	A	232	6.906	23.954	47.019	1.00	22.00
ATOM	282	CG	GLU	A	232	7.604	22.611	47.022	1.00	29.05
ATOM	283	CD	GLU	A	232	6.700	21.416	46.813	1.00	26.81
ATOM	284	OE1	GLU	A	232	6.616	20.555	47.717	1.00	29.85
ATOM	285	OE2	GLU	A	232	6.062	21.310	45.747	1.00	23.85
ATOM	286	C	GLU	A	232	6.597	26.041	45.720	1.00	20.47
ATOM	287	O	GLU	A	232	7.687	26.581	45.913	1.00	28.66
ATOM	288	N	PRO	A	233	5.478	26.730	45.550	1.00	20.17
ATOM	289	CD	PRO	A	233	4.138	26.148	45.296	1.00	16.89
ATOM	290	CA	PRO	A	233	5.441	28.182	45.560	1.00	17.73
ATOM	291	CB	PRO	A	233	4.018	28.530	45.154	1.00	17.21
ATOM	292	CG	PRO	A	233	3.403	27.283	44.628	1.00	12.03
ATOM	293	C	PRO	A	233	5.794	28.768	46.918	1.00	19.89
ATOM	294	O	PRO	A	233	5.486	28.165	47.949	1.00	15.81
ATOM	295	N	LEU	A	234	6.449	29.930	46.914	1.00	19.93
ATOM	296	CA	LEU	A	234	6.837	30.598	48.154	1.00	12.99
ATOM	297	CB	LEU	A	234	7.526	31.926	47.856	1.00	12.05
ATOM	298	CG	LEU	A	234	8.881	31.881	47.152	1.00	16.42
ATOM	299	CD1	LEU	A	234	9.019	33.083	46.225	1.00	16.62
ATOM	300	CD2	LEU	A	234	10.032	31.845	48.151	1.00	9.69

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ATOM	301	C	LEU A 234	5.613	30.850	49.031	1.00	12.91
ATOM	302	O	LEU A 234	4.474	30.845	48.554	1.00	12.21
ATOM	303	N	PRO A 235	5.858	31.076	50.315	1.00	7.89
ATOM	304	CD	PRO A 235	7.189	31.130	50.950	1.00	6.27
ATOM	305	CA	PRO A 235	4.792	31.340	51.268	1.00	11.97
ATOM	306	CB	PRO A 235	5.453	31.191	52.624	1.00	7.76
ATOM	307	CG	PRO A 235	6.892	31.471	52.382	1.00	10.68
ATOM	308	C	PRO A 235	4.214	32.727	51.047	1.00	19.59
ATOM	309	O	PRO A 235	4.727	33.503	50.233	1.00	28.68
ATOM	310	N	GLU A 236	3.153	33.067	51.765	1.00	16.72
ATOM	311	CA	GLU A 236	2.519	34.370	51.604	1.00	15.33
ATOM	312	CB	GLU A 236	1.121	34.351	52.224	1.00	21.50
ATOM	313	CG	GLU A 236	0.966	33.404	53.409	1.00	23.69
ATOM	314	CD	GLU A 236	1.773	33.869	54.606	1.00	25.23
ATOM	315	OE1	GLU A 236	2.916	33.397	54.777	1.00	30.32
ATOM	316	OE2	GLU A 236	1.235	34.724	55.341	1.00	24.63
ATOM	317	C	GLU A 236	3.349	35.513	52.157	1.00	22.25
ATOM	318	O	GLU A 236	3.246	36.624	51.622	1.00	32.43
ATOM	319	N	ASN A 237	4.186	35.290	53.167	1.00	20.30
ATOM	320	CA	ASN A 237	4.980	36.365	53.745	1.00	17.39
ATOM	321	CB	ASN A 237	5.137	36.177	55.258	1.00	16.56
ATOM	322	CG	ASN A 237	5.951	34.961	55.636	1.00	20.13
ATOM	323	OD1	ASN A 237	6.180	34.065	54.824	1.00	25.83
ATOM	324	ND2	ASN A 237	6.396	34.929	56.887	1.00	23.16
ATOM	325	C	ASN A 237	6.346	36.549	53.107	1.00	20.70
ATOM	326	O	ASN A 237	7.150	37.325	53.643	1.00	30.68
ATOM	327	N	VAL A 238	6.639	35.886	51.997	1.00	17.54
ATOM	328	CA	VAL A 238	7.939	36.052	51.334	1.00	13.46
ATOM	329	CB	VAL A 238	8.608	34.698	51.085	1.00	17.05
ATOM	330	CG1	VAL A 238	9.844	34.816	50.203	1.00	28.38
ATOM	331	CG2	VAL A 238	9.003	34.054	52.417	1.00	10.92
ATOM	332	C	VAL A 238	7.731	36.856	50.057	1.00	12.46
ATOM	333	O	VAL A 238	7.495	36.325	48.978	1.00	13.68
ATOM	334	N	LYS A 239	7.792	38.177	50.186	1.00	14.69
ATOM	335	CA	LYS A 239	7.546	39.122	49.123	1.00	6.59
ATOM	336	CB	LYS A 239	7.134	40.481	49.729	1.00	10.55
ATOM	337	CG	LYS A 239	5.688	40.568	50.173	1.00	16.36
ATOM	338	CD	LYS A 239	5.401	39.770	51.434	1.00	12.34
ATOM	339	CE	LYS A 239	4.017	40.099	51.975	1.00	17.13
ATOM	340	NZ	LYS A 239	2.945	39.791	50.989	1.00	14.35
ATOM	341	C	LYS A 239	8.687	39.415	48.162	1.00	11.86
ATOM	342	O	LYS A 239	9.865	39.458	48.498	1.00	21.84
ATOM	343	N	PHE A 240	8.288	39.702	46.927	1.00	2.33
ATOM	344	CA	PHE A 240	9.174	40.106	45.849	1.00	6.86
ATOM	345	CB	PHE A 240	9.108	39.144	44.665	1.00	2.00
ATOM	346	CG	PHE A 240	9.573	39.772	43.375	1.00	7.51
ATOM	347	CD1	PHE A 240	10.923	39.938	43.175	1.00	2.00
ATOM	348	CD2	PHE A 240	8.675	40.151	42.394	1.00	2.00
ATOM	349	CE1	PHE A 240	11.367	40.579	42.004	1.00	9.11
ATOM	350	CE2	PHE A 240	9.118	40.729	41.222	1.00	2.00
ATOM	351	CZ	PHE A 240	10.465	40.945	41.025	1.00	3.57
ATOM	352	C	PHE A 240	8.730	41.500	45.390	1.00	12.48
ATOM	353	O	PHE A 240	7.575	41.659	44.980	1.00	24.52
ATOM	354	N	TYR A 241	9.633	42.464	45.416	1.00	9.59
ATOM	355	CA	TYR A 241	9.312	43.822	45.030	1.00	7.03
ATOM	356	CB	TYR A 241	9.933	44.806	46.045	1.00	9.10
ATOM	357	CG	TYR A 241	9.410	44.582	47.441	1.00	10.89
ATOM	358	CD1	TYR A 241	9.936	43.591	48.255	1.00	11.94
ATOM	359	CE1	TYR A 241	9.438	43.393	49.531	1.00	18.94
ATOM	360	CD2	TYR A 241	8.378	45.370	47.929	1.00	17.14
ATOM	361	CE2	TYR A 241	7.877	45.177	49.206	1.00	17.11
ATOM	362	CZ	TYR A 241	8.411	44.186	49.998	1.00	15.08
ATOM	363	OH	TYR A 241	7.928	43.975	51.265	1.00	16.74

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ATOM	364	C	TYR	A	241	9.858	44.287	43.689	1.00	6.55
ATOM	365	O	TYR	A	241	11.033	44.089	43.390	1.00	22.08
ATOM	366	N	TYR	A	242	9.021	44.990	42.942	1.00	2.00
ATOM	367	CA	TYR	A	242	9.444	45.615	41.706	1.00	6.78
ATOM	368	CB	TYR	A	242	8.766	45.051	40.466	1.00	5.53
ATOM	369	CG	TYR	A	242	9.322	45.772	39.245	1.00	7.04
ATOM	370	CD1	TYR	A	242	10.612	45.491	38.821	1.00	10.08
ATOM	371	CE1	TYR	A	242	11.153	46.134	37.724	1.00	8.71
ATOM	372	CD2	TYR	A	242	8.591	46.730	38.569	1.00	8.87
ATOM	373	CE2	TYR	A	242	9.126	47.376	37.472	1.00	8.21
ATOM	374	CZ	TYR	A	242	10.405	47.079	37.054	1.00	9.31
ATOM	375	OH	TYR	A	242	10.939	47.723	35.958	1.00	5.78
ATOM	376	C	TYR	A	242	9.207	47.121	41.832	1.00	14.71
ATOM	377	O	TYR	A	242	8.156	47.562	42.302	1.00	11.39
ATOM	378	N	ASP	A	243	10.247	47.900	41.543	1.00	13.94
ATOM	379	CA	ASP	A	243	10.235	49.351	41.622	1.00	6.64
ATOM	380	CB	ASP	A	243	9.358	49.927	40.505	1.00	11.53
ATOM	381	CG	ASP	A	243	9.690	51.353	40.125	1.00	20.92
ATOM	382	OD1	ASP	A	243	9.072	51.882	39.172	1.00	25.45
ATOM	383	OD2	ASP	A	243	10.577	51.974	40.751	1.00	23.05
ATOM	384	C	ASP	A	243	9.766	49.878	42.968	1.00	2.00
ATOM	385	O	ASP	A	243	9.142	50.934	43.072	1.00	10.38
ATOM	386	N	GLY	A	244	10.057	49.151	44.046	1.00	9.67
ATOM	387	CA	GLY	A	244	9.675	49.450	45.402	1.00	10.42
ATOM	388	C	GLY	A	244	8.282	48.992	45.801	1.00	17.97
ATOM	389	O	GLY	A	244	7.845	49.311	46.914	1.00	22.27
ATOM	390	N	LYS	A	245	7.554	48.268	44.955	1.00	20.64
ATOM	391	CA	LYS	A	245	6.193	47.845	45.259	1.00	22.29
ATOM	392	CB	LYS	A	245	5.236	48.561	44.282	1.00	22.35
ATOM	393	CG	LYS	A	245	5.040	50.034	44.605	1.00	20.93
ATOM	394	CD	LYS	A	245	4.564	50.836	43.407	1.00	14.62
ATOM	395	CE	LYS	A	245	5.718	51.303	42.540	1.00	6.74
ATOM	396	NZ	LYS	A	245	5.274	52.259	41.491	1.00	9.09
ATOM	397	C	LYS	A	245	5.929	46.347	45.188	1.00	18.58
ATOM	398	O	LYS	A	245	6.177	45.705	44.164	1.00	20.13
ATOM	399	N	VAL	A	246	5.366	45.787	46.257	1.00	10.06
ATOM	400	CA	VAL	A	246	5.035	44.372	46.334	1.00	2.00
ATOM	401	CB	VAL	A	246	3.993	44.073	47.429	1.00	4.65
ATOM	402	CG1	VAL	A	246	3.727	42.579	47.569	1.00	4.85
ATOM	403	CG2	VAL	A	246	4.469	44.645	48.758	1.00	2.00
ATOM	404	C	VAL	A	246	4.492	43.837	45.013	1.00	7.55
ATOM	405	O	VAL	A	246	3.753	44.539	44.323	1.00	18.80
ATOM	406	N	MET	A	247	4.847	42.596	44.692	1.00	3.52
ATOM	407	CA	MET	A	247	4.366	42.016	43.435	1.00	11.62
ATOM	408	CB	MET	A	247	5.251	42.498	42.287	1.00	6.96
ATOM	409	CG	MET	A	247	5.057	41.776	40.963	1.00	6.35
ATOM	410	SD	MET	A	247	5.526	42.833	39.580	1.00	8.80
ATOM	411	CE	MET	A	247	5.540	41.654	38.233	1.00	13.89
ATOM	412	C	MET	A	247	4.310	40.498	43.522	1.00	13.39
ATOM	413	O	MET	A	247	5.314	39.869	43.861	1.00	19.80
ATOM	414	N	LYS	A	248	3.134	39.934	43.258	1.00	7.04
ATOM	415	CA	LYS	A	248	2.988	38.473	43.285	1.00	2.00
ATOM	416	CB	LYS	A	248	1.586	38.050	43.670	1.00	11.46
ATOM	417	CG	LYS	A	248	1.154	36.635	43.341	1.00	13.68
ATOM	418	CD	LYS	A	248	0.148	36.609	42.198	1.00	25.41
ATOM	419	CE	LYS	A	248	0.163	35.294	41.436	1.00	28.34
ATOM	420	NZ	LYS	A	248	0.223	34.104	42.330	1.00	23.91
ATOM	421	C	LYS	A	248	3.441	37.975	41.912	1.00	10.81
ATOM	422	O	LYS	A	248	3.217	38.647	40.903	1.00	14.80
ATOM	423	N	LEU	A	249	4.150	36.854	41.876	1.00	10.44
ATOM	424	CA	LEU	A	249	4.677	36.321	40.628	1.00	2.88
ATOM	425	CB	LEU	A	249	6.207	36.280	40.684	1.00	4.41
ATOM	426	CG	LEU	A	249	6.987	37.557	40.394	1.00	10.71



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ATOM	427	CD1	LEU	A	249	8.479	37.327	40.605	1.00	16.15
ATOM	428	CD2	LEU	A	249	6.755	38.042	38.968	1.00	8.46
ATOM	429	C	LEU	A	249	4.171	34.915	40.329	1.00	2.00
ATOM	430	O	LEU	A	249	4.406	33.987	41.107	1.00	4.91
ATOM	431	N	SER	A	250	3.520	34.756	39.182	1.00	3.46
ATOM	432	CA	SER	A	250	3.003	33.439	38.803	1.00	2.00
ATOM	433	CB	SER	A	250	2.535	33.480	37.351	1.00	2.00
ATOM	434	OG	SER	A	250	3.472	34.158	36.528	1.00	2.00
ATOM	435	C	SER	A	250	4.065	32.380	39.035	1.00	2.00
ATOM	436	O	SER	A	250	5.258	32.643	38.902	1.00	2.00
ATOM	437	N	PRO	A	251	3.639	31.166	39.372	1.00	2.00
ATOM	438	CD	PRO	A	251	2.210	30.786	39.535	1.00	2.00
ATOM	439	CA	PRO	A	251	4.519	30.039	39.634	1.00	2.00
ATOM	440	CB	PRO	A	251	3.571	28.842	39.574	1.00	8.01
ATOM	441	CG	PRO	A	251	2.292	29.393	40.115	1.00	7.21
ATOM	442	C	PRO	A	251	5.677	29.895	38.671	1.00	5.09
ATOM	443	O	PRO	A	251	6.836	29.943	39.081	1.00	6.10
ATOM	444	N	LYS	A	252	5.381	29.759	37.381	1.00	2.00
ATOM	445	CA	LYS	A	252	6.420	29.648	36.364	1.00	2.00
ATOM	446	CB	LYS	A	252	5.849	29.748	34.952	1.00	6.91
ATOM	447	CG	LYS	A	252	6.848	29.537	33.837	1.00	4.74
ATOM	448	CD	LYS	A	252	6.247	28.887	32.607	1.00	9.51
ATOM	449	CE	LYS	A	252	5.603	29.844	31.629	1.00	11.50
ATOM	450	NZ	LYS	A	252	5.599	29.338	30.221	1.00	2.59
ATOM	451	C	LYS	A	252	7.458	30.747	36.579	1.00	10.00
ATOM	452	O	LYS	A	252	8.613	30.443	36.887	1.00	26.59
ATOM	453	N	ALA	A	253	7.058	32.008	36.463	1.00	2.00
ATOM	454	CA	ALA	A	253	7.948	33.142	36.649	1.00	6.27
ATOM	455	CB	ALA	A	253	7.154	34.426	36.442	1.00	7.06
ATOM	456	C	ALA	A	253	8.634	33.170	38.008	1.00	10.20
ATOM	457	O	ALA	A	253	9.836	33.433	38.079	1.00	15.57
ATOM	458	N	GLU	A	254	7.895	32.914	39.078	1.00	13.71
ATOM	459	CA	GLU	A	254	8.432	32.928	40.435	1.00	16.02
ATOM	460	CB	GLU	A	254	7.323	32.598	41.436	1.00	11.56
ATOM	461	CG	GLU	A	254	7.724	32.623	42.895	1.00	2.00
ATOM	462	CD	GLU	A	254	6.561	32.376	43.836	1.00	13.81
ATOM	463	OE1	GLU	A	254	6.176	31.209	44.056	1.00	16.82
ATOM	464	OE2	GLU	A	254	6.026	33.376	44.360	1.00	23.50
ATOM	465	C	GLU	A	254	9.596	31.955	40.567	1.00	21.40
ATOM	466	O	GLU	A	254	10.710	32.316	40.957	1.00	23.07
ATOM	467	N	GLU	A	255	9.348	30.705	40.183	1.00	20.09
ATOM	468	CA	GLU	A	255	10.354	29.650	40.239	1.00	17.71
ATOM	469	CB	GLU	A	255	9.838	28.384	39.561	1.00	4.35
ATOM	470	CG	GLU	A	255	10.794	27.207	39.559	1.00	2.00
ATOM	471	CD	GLU	A	255	10.250	26.053	38.739	1.00	2.00
ATOM	472	OE1	GLU	A	255	10.539	24.876	39.033	1.00	10.41
ATOM	473	OE2	GLU	A	255	9.524	26.345	37.763	1.00	2.00
ATOM	474	C	GLU	A	255	11.676	30.109	39.644	1.00	17.50
ATOM	475	O	GLU	A	255	12.706	29.989	40.314	1.00	23.69
ATOM	476	N	VAL	A	256	11.670	30.680	38.445	1.00	15.62
ATOM	477	CA	VAL	A	256	12.895	31.199	37.835	1.00	8.97
ATOM	478	CB	VAL	A	256	12.646	31.782	36.433	1.00	7.46
ATOM	479	CG1	VAL	A	256	13.945	32.044	35.691	1.00	2.00
ATOM	480	CG2	VAL	A	256	11.781	30.805	35.642	1.00	2.00
ATOM	481	C	VAL	A	256	13.518	32.267	38.723	1.00	5.18
ATOM	482	O	VAL	A	256	14.739	32.250	38.872	1.00	2.00
ATOM	483	N	ALA	A	257	12.717	33.153	39.315	1.00	2.00
ATOM	484	CA	ALA	A	257	13.257	34.151	40.226	1.00	2.00
ATOM	485	CB	ALA	A	257	12.175	35.113	40.696	1.00	7.62
ATOM	486	C	ALA	A	257	13.930	33.522	41.439	1.00	2.00
ATOM	487	O	ALA	A	257	14.931	34.078	41.905	1.00	2.00
ATOM	488	N	THR	A	258	13.420	32.420	41.999	1.00	5.85
ATOM	489	CA	THR	A	258	14.080	31.820	43.158	1.00	8.21

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ATOM	490	CB	THR	A	258	13.414	30.573	43.751	1.00	11.59
ATOM	491	OG1	THR	A	258	13.209	29.568	42.748	1.00	13.48
ATOM	492	CG2	THR	A	258	12.081	30.933	44.388	1.00	16.02
ATOM	493	C	THR	A	258	15.520	31.466	42.794	1.00	12.46
ATOM	494	O	THR	A	258	16.429	31.722	43.588	1.00	29.74
ATOM	495	N	PHE	A	259	15.727	30.900	41.609	1.00	5.70
ATOM	496	CA	PHE	A	259	17.078	30.560	41.166	1.00	2.00
ATOM	497	CB	PHE	A	259	17.037	30.039	39.732	1.00	2.00
ATOM	498	CG	PHE	A	259	16.066	28.915	39.483	1.00	2.00
ATOM	499	CD1	PHE	A	259	15.779	27.986	40.467	1.00	5.29
ATOM	500	CD2	PHE	A	259	15.441	28.770	38.261	1.00	6.63
ATOM	501	CE1	PHE	A	259	14.899	26.950	40.256	1.00	4.63
ATOM	502	CE2	PHE	A	259	14.554	27.732	38.038	1.00	17.19
ATOM	503	CZ	PHE	A	259	14.277	26.817	39.037	1.00	3.38
ATOM	504	C	PHE	A	259	18.028	31.732	41.382	1.00	2.00
ATOM	505	O	PHE	A	259	18.949	31.625	42.196	1.00	2.00
ATOM	506	N	PHE	A	260	17.789	32.878	40.773	1.00	5.41
ATOM	507	CA	PHE	A	260	18.625	34.056	40.939	1.00	6.04
ATOM	508	CB	PHE	A	260	18.103	35.172	40.030	1.00	7.06
ATOM	509	CG	PHE	A	260	19.007	36.364	39.928	1.00	7.59
ATOM	510	CD1	PHE	A	260	19.846	36.504	38.834	1.00	2.00
ATOM	511	CD2	PHE	A	260	19.013	37.351	40.899	1.00	6.52
ATOM	512	CE1	PHE	A	260	20.677	37.602	38.713	1.00	2.00
ATOM	513	CE2	PHE	A	260	19.845	38.448	40.786	1.00	7.49
ATOM	514	CZ	PHE	A	260	20.673	38.574	39.689	1.00	2.00
ATOM	515	C	PHE	A	260	18.696	34.565	42.366	1.00	4.41
ATOM	516	O	PHE	A	260	19.720	35.117	42.774	1.00	15.46
ATOM	517	N	ALA	A	261	17.641	34.424	43.161	1.00	6.59
ATOM	518	CA	ALA	A	261	17.643	34.878	44.547	1.00	5.15
ATOM	519	CB	ALA	A	261	16.243	34.924	45.131	1.00	2.00
ATOM	520	C	ALA	A	261	18.532	33.993	45.412	1.00	4.51
ATOM	521	O	ALA	A	261	19.090	34.491	46.383	1.00	2.00
ATOM	522	N	LYS	A	262	18.668	32.720	45.056	1.00	2.00
ATOM	523	CA	LYS	A	262	19.529	31.797	45.773	1.00	11.16
ATOM	524	CB	LYS	A	262	19.166	30.351	45.445	1.00	6.56
ATOM	525	CG	LYS	A	262	17.793	29.877	45.870	1.00	6.06
ATOM	526	CD	LYS	A	262	17.760	28.350	45.814	1.00	2.00
ATOM	527	CE	LYS	A	262	16.349	27.804	45.925	1.00	2.00
ATOM	528	NZ	LYS	A	262	16.284	26.336	45.688	1.00	2.00
ATOM	529	C	LYS	A	262	21.005	32.011	45.430	1.00	20.50
ATOM	530	O	LYS	A	262	21.882	31.681	46.228	1.00	27.05
ATOM	531	N	MET	A	263	21.294	32.560	44.255	1.00	21.37
ATOM	532	CA	MET	A	263	22.638	32.823	43.783	1.00	18.96
ATOM	533	CB	MET	A	263	22.699	32.593	42.268	1.00	19.64
ATOM	534	CG	MET	A	263	22.521	31.147	41.848	1.00	15.28
ATOM	535	SD	MET	A	263	22.956	30.939	40.108	1.00	19.85
ATOM	536	CE	MET	A	263	23.485	29.224	40.129	1.00	14.75
ATOM	537	C	MET	A	263	23.080	34.263	44.020	1.00	22.58
ATOM	538	O	MET	A	263	24.098	34.723	43.501	1.00	25.89
ATOM	539	N	LEU	A	264	22.317	34.990	44.819	1.00	22.45
ATOM	540	CA	LEU	A	264	22.575	36.389	45.104	1.00	22.55
ATOM	541	CB	LEU	A	264	21.404	36.929	45.944	1.00	15.21
ATOM	542	CG	LEU	A	264	21.012	38.378	45.627	1.00	11.08
ATOM	543	CD1	LEU	A	264	20.755	38.540	44.136	1.00	2.00
ATOM	544	CD2	LEU	A	264	19.811	38.797	46.457	1.00	10.88
ATOM	545	C	LEU	A	264	23.920	36.688	45.739	1.00	23.19
ATOM	546	O	LEU	A	264	24.495	37.744	45.424	1.00	26.75
ATOM	547	N	ASP	A	265	24.453	35.816	46.593	1.00	16.59
ATOM	548	CA	ASP	A	265	25.758	36.089	47.196	1.00	10.67
ATOM	549	CB	ASP	A	265	26.080	35.083	48.296	1.00	9.54
ATOM	550	CG	ASP	A	265	24.901	34.823	49.216	1.00	23.16
ATOM	551	OD1	ASP	A	265	24.519	33.635	49.310	1.00	28.41
ATOM	552	OD2	ASP	A	265	24.368	35.779	49.820	1.00	24.64

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ATOM	553	C	ASP	A	265	26.852	36.110	46.132	1.00	11.24
ATOM	554	O	ASP	A	265	27.616	37.078	46.067	1.00	15.16
ATOM	555	N	HIS	A	266	26.933	35.091	45.283	1.00	3.58
ATOM	556	CA	HIS	A	266	27.954	35.003	44.257	1.00	2.00
ATOM	557	CB	HIS	A	266	27.614	33.931	43.214	1.00	9.47
ATOM	558	CG	HIS	A	266	27.552	32.551	43.789	1.00	13.94
ATOM	559	CD2	HIS	A	266	28.523	31.741	44.267	1.00	18.18
ATOM	560	ND1	HIS	A	266	26.367	31.863	43.930	1.00	20.37
ATOM	561	CE1	HIS	A	266	26.614	30.681	44.469	1.00	22.70
ATOM	562	NE2	HIS	A	266	27.912	30.583	44.687	1.00	19.41
ATOM	563	C	HIS	A	266	28.216	36.321	43.539	1.00	11.09
ATOM	564	O	HIS	A	266	27.370	37.203	43.441	1.00	17.04
ATOM	565	N	GLU	A	267	29.422	36.426	42.986	1.00	10.27
ATOM	566	CA	GLU	A	267	29.849	37.604	42.257	1.00	11.39
ATOM	567	CB	GLU	A	267	31.376	37.722	42.296	1.00	19.59
ATOM	568	CG	GLU	A	267	32.003	38.041	43.640	1.00	23.35
ATOM	569	CD	GLU	A	267	33.357	38.709	43.445	1.00	27.30
ATOM	570	OE1	GLU	A	267	34.382	38.055	43.722	1.00	36.10
ATOM	571	OE2	GLU	A	267	33.376	39.879	43.004	1.00	24.81
ATOM	572	C	GLU	A	267	29.422	37.562	40.795	1.00	12.53
ATOM	573	O	GLU	A	267	29.272	38.613	40.167	1.00	13.78
ATOM	574	N	TYR	A	268	29.200	36.365	40.249	1.00	10.50
ATOM	575	CA	TYR	A	268	28.851	36.207	38.844	1.00	7.77
ATOM	576	CB	TYR	A	268	29.032	34.770	38.367	1.00	15.57
ATOM	577	CG	TYR	A	268	28.220	33.706	39.059	1.00	16.49
ATOM	578	CD1	TYR	A	268	26.841	33.632	38.916	1.00	20.39
ATOM	579	CE1	TYR	A	268	26.106	32.646	39.551	1.00	26.42
ATOM	580	CD2	TYR	A	268	28.847	32.746	39.842	1.00	17.59
ATOM	581	CE2	TYR	A	268	28.123	31.755	40.481	1.00	23.21
ATOM	582	CZ	TYR	A	268	26.754	31.710	40.331	1.00	25.55
ATOM	583	OH	TYR	A	268	26.030	30.727	40.964	1.00	26.70
ATOM	584	C	TYR	A	268	27.467	36.709	38.476	1.00	4.88
ATOM	585	O	TYR	A	268	27.169	36.947	37.304	1.00	13.21
ATOM	586	N	THR	A	269	26.607	36.949	39.455	1.00	2.00
ATOM	587	CA	THR	A	269	25.286	37.509	39.229	1.00	5.80
ATOM	588	CB	THR	A	269	24.411	37.341	40.487	1.00	2.00
ATOM	589	OG1	THR	A	269	25.128	37.968	41.551	1.00	2.00
ATOM	590	CG2	THR	A	269	24.173	35.874	40.774	1.00	2.00
ATOM	591	C	THR	A	269	25.391	38.989	38.887	1.00	12.90
ATOM	592	O	THR	A	269	24.444	39.570	38.357	1.00	21.09
ATOM	593	N	THR	A	270	26.525	39.618	39.177	1.00	14.50
ATOM	594	CA	THR	A	270	26.773	41.014	38.879	1.00	8.37
ATOM	595	CB	THR	A	270	27.755	41.673	39.870	1.00	6.38
ATOM	596	OG1	THR	A	270	29.068	41.153	39.609	1.00	2.00
ATOM	597	CG2	THR	A	270	27.393	41.396	41.313	1.00	5.00
ATOM	598	C	THR	A	270	27.364	41.194	37.482	1.00	2.00
ATOM	599	O	THR	A	270	27.486	42.334	37.029	1.00	11.93
ATOM	600	N	LYS	A	271	27.755	40.111	36.823	1.00	2.00
ATOM	601	CA	LYS	A	271	28.333	40.192	35.482	1.00	2.00
ATOM	602	CB	LYS	A	271	29.057	38.885	35.139	1.00	4.93
ATOM	603	CG	LYS	A	271	30.125	38.526	36.164	1.00	2.00
ATOM	604	CD	LYS	A	271	30.622	37.102	35.999	1.00	18.51
ATOM	605	CE	LYS	A	271	31.964	36.878	36.690	1.00	20.56
ATOM	606	NZ	LYS	A	271	32.395	35.449	36.596	1.00	13.67
ATOM	607	C	LYS	A	271	27.282	40.503	34.423	1.00	5.03
ATOM	608	O	LYS	A	271	26.095	40.203	34.570	1.00	19.01
ATOM	609	N	GLU	A	272	27.709	41.104	33.323	1.00	2.00
ATOM	610	CA	GLU	A	272	26.820	41.478	32.228	1.00	2.00
ATOM	611	CB	GLU	A	272	27.616	42.226	31.147	1.00	12.31
ATOM	612	CG	GLU	A	272	27.582	43.740	31.295	1.00	23.33
ATOM	613	CD	GLU	A	272	26.271	44.302	30.769	1.00	23.83
ATOM	614	OE1	GLU	A	272	25.838	43.862	29.680	1.00	25.76
ATOM	615	OE2	GLU	A	272	25.692	45.172	31.450	1.00	21.89

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ATOM	616	C	GLU	A	272	26.123	40.318	31.537	1.00	2.00
ATOM	617	O	GLU	A	272	24.913	40.274	31.341	1.00	6.14
ATOM	618	N	ILE	A	273	26.909	39.327	31.152	1.00	2.00
ATOM	619	CA	ILE	A	273	26.455	38.128	30.457	1.00	2.00
ATOM	620	CB	ILE	A	273	27.706	37.348	30.008	1.00	2.00
ATOM	621	CG2	ILE	A	273	27.435	35.882	29.736	1.00	2.00
ATOM	622	CG1	ILE	A	273	28.295	38.042	28.770	1.00	2.00
ATOM	623	CD1	ILE	A	273	29.648	37.537	28.334	1.00	2.00
ATOM	624	C	ILE	A	273	25.509	37.283	31.288	1.00	2.00
ATOM	625	O	ILE	A	273	24.600	36.625	30.769	1.00	2.00
ATOM	626	N	PHE	A	274	25.688	37.291	32.607	1.00	2.00
ATOM	627	CA	PHE	A	274	24.833	36.534	33.500	1.00	2.00
ATOM	628	CB	PHE	A	274	25.388	36.437	34.921	1.00	2.00
ATOM	629	CG	PHE	A	274	24.661	35.394	35.731	1.00	10.84
ATOM	630	CD1	PHE	A	274	25.123	34.088	35.764	1.00	13.60
ATOM	631	CD2	PHE	A	274	23.519	35.715	36.450	1.00	8.09
ATOM	632	CE1	PHE	A	274	24.464	33.119	36.499	1.00	6.27
ATOM	633	CE2	PHE	A	274	22.860	34.752	37.186	1.00	2.00
ATOM	634	CZ	PHE	A	274	23.330	33.454	37.212	1.00	2.00
ATOM	635	C	PHE	A	274	23.452	37.176	33.608	1.00	12.08
ATOM	636	O	PHE	A	274	22.439	36.480	33.598	1.00	24.38
ATOM	637	N	ARG	A	275	23.423	38.494	33.769	1.00	13.81
ATOM	638	CA	ARG	A	275	22.150	39.207	33.888	1.00	7.91
ATOM	639	CB	ARG	A	275	22.389	40.583	34.515	1.00	7.89
ATOM	640	CG	ARG	A	275	22.823	40.461	35.976	1.00	11.25
ATOM	641	CD	ARG	A	275	23.722	41.618	36.375	1.00	15.24
ATOM	642	NE	ARG	A	275	22.979	42.804	36.767	1.00	17.76
ATOM	643	CZ	ARG	A	275	22.365	42.997	37.925	1.00	11.98
ATOM	644	NH1	ARG	A	275	22.391	42.076	38.874	1.00	19.09
ATOM	645	NH2	ARG	A	275	21.728	44.143	38.125	1.00	10.93
ATOM	646	C	ARG	A	275	21.474	39.306	32.526	1.00	2.00
ATOM	647	O	ARG	A	275	20.249	39.244	32.457	1.00	2.00
ATOM	648	N	LYS	A	276	22.267	39.439	31.462	1.00	2.00
ATOM	649	CA	LYS	A	276	21.698	39.512	30.122	1.00	10.35
ATOM	650	CB	LYS	A	276	22.762	39.633	29.030	1.00	13.76
ATOM	651	CG	LYS	A	276	22.204	39.518	27.615	1.00	13.05
ATOM	652	CD	LYS	A	276	23.149	40.120	26.587	1.00	19.86
ATOM	653	CE	LYS	A	276	24.267	39.149	26.235	1.00	27.51
ATOM	654	NZ	LYS	A	276	23.705	37.848	25.758	1.00	25.64
ATOM	655	C	LYS	A	276	20.851	38.258	29.896	1.00	10.39
ATOM	656	O	LYS	A	276	19.624	38.315	29.922	1.00	8.04
ATOM	657	N	ASN	A	277	21.540	37.127	29.733	1.00	7.81
ATOM	658	CA	ASN	A	277	20.850	35.866	29.510	1.00	2.00
ATOM	659	CB	ASN	A	277	21.796	34.674	29.438	1.00	2.00
ATOM	660	CG	ASN	A	277	22.944	34.813	28.468	1.00	14.72
ATOM	661	OD1	ASN	A	277	24.093	34.538	28.833	1.00	28.98
ATOM	662	ND2	ASN	A	277	22.686	35.218	27.233	1.00	11.90
ATOM	663	C	ASN	A	277	19.803	35.615	30.594	1.00	2.00
ATOM	664	O	ASN	A	277	18.684	35.298	30.163	1.00	2.00
ATOM	665	N	PHE	A	278	20.118	35.741	31.896	1.00	2.00
ATOM	666	CA	PHE	A	278	19.051	35.430	32.854	1.00	2.00
ATOM	667	CB	PHE	A	278	19.499	35.681	34.291	1.00	2.22
ATOM	668	CG	PHE	A	278	18.358	35.682	35.272	1.00	2.00
ATOM	669	CD1	PHE	A	278	17.770	34.491	35.662	1.00	9.63
ATOM	670	CD2	PHE	A	278	17.866	36.872	35.783	1.00	2.94
ATOM	671	CE1	PHE	A	278	16.718	34.483	36.558	1.00	9.68
ATOM	672	CE2	PHE	A	278	16.812	36.867	36.677	1.00	9.31
ATOM	673	CZ	PHE	A	278	16.238	35.675	37.066	1.00	8.70
ATOM	674	C	PHE	A	278	17.760	36.180	32.542	1.00	2.00
ATOM	675	O	PHE	A	278	16.724	35.569	32.269	1.00	7.72
ATOM	676	N	PHE	A	279	17.796	37.506	32.579	1.00	2.00
ATOM	677	CA	PHE	A	279	16.633	38.321	32.288	1.00	2.00
ATOM	678	CB	PHE	A	279	16.948	39.809	32.208	1.00	2.00

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ATOM	679	CG	PHE A 279	15.686	40.624	32.334	1.00	2.00
ATOM	680	CD1	PHE A 279	15.002	40.688	33.534	1.00	5.20
ATOM	681	CD2	PHE A 279	15.200	41.318	31.239	1.00	11.00
ATOM	682	CE1	PHE A 279	13.849	41.437	33.647	1.00	8.10
ATOM	683	CE2	PHE A 279	14.052	42.074	31.343	1.00	13.04
ATOM	684	CZ	PHE A 279	13.379	42.128	32.547	1.00	17.50
ATOM	685	C	PHE A 279	15.925	37.841	31.031	1.00	2.00
ATOM	686	O	PHE A 279	14.786	37.379	31.126	1.00	18.78
ATOM	687	N	LYS A 280	16.601	37.874	29.890	1.00	2.00
ATOM	688	CA	LYS A 280	16.024	37.400	28.630	1.00	2.00
ATOM	689	CB	LYS A 280	17.116	37.273	27.579	1.00	2.00
ATOM	690	CG	LYS A 280	16.702	36.689	26.247	1.00	2.00
ATOM	691	CD	LYS A 280	17.657	37.136	25.147	1.00	8.59
ATOM	692	CE	LYS A 280	17.547	36.225	23.928	1.00	13.63
ATOM	693	NZ	LYS A 280	17.990	34.835	24.251	1.00	18.35
ATOM	694	C	LYS A 280	15.255	36.108	28.854	1.00	2.00
ATOM	695	O	LYS A 280	14.046	36.092	28.598	1.00	17.46
ATOM	696	N	ASP A 281	15.891	35.062	29.375	1.00	2.00
ATOM	697	CA	ASP A 281	15.183	33.812	29.642	1.00	2.04
ATOM	698	CB	ASP A 281	16.155	32.751	30.150	1.00	9.66
ATOM	699	CG	ASP A 281	17.003	32.163	29.041	1.00	7.80
ATOM	700	OD1	ASP A 281	17.921	31.373	29.323	1.00	6.98
ATOM	701	OD2	ASP A 281	16.773	32.465	27.852	1.00	19.17
ATOM	702	C	ASP A 281	14.001	34.016	30.575	1.00	12.27
ATOM	703	O	ASP A 281	12.881	33.644	30.194	1.00	14.89
ATOM	704	N	TRP A 282	14.176	34.687	31.711	1.00	6.54
ATOM	705	CA	TRP A 282	13.092	34.968	32.649	1.00	2.00
ATOM	706	CB	TRP A 282	13.570	35.880	33.767	1.00	4.38
ATOM	707	CG	TRP A 282	12.780	35.943	35.030	1.00	2.00
ATOM	708	CD2	TRP A 282	12.725	37.059	35.934	1.00	2.00
ATOM	709	CE2	TRP A 282	11.877	36.698	37.003	1.00	7.90
ATOM	710	CE3	TRP A 282	13.290	38.340	35.924	1.00	2.00
ATOM	711	CD1	TRP A 282	12.006	34.971	35.595	1.00	8.48
ATOM	712	NE1	TRP A 282	11.450	35.414	36.772	1.00	2.00
ATOM	713	CZ2	TRP A 282	11.593	37.559	38.060	1.00	5.22
ATOM	714	CZ3	TRP A 282	13.002	39.190	36.976	1.00	8.88
ATOM	715	CH2	TRP A 282	12.161	38.802	38.029	1.00	2.00
ATOM	716	C	TRP A 282	11.866	35.583	31.981	1.00	8.75
ATOM	717	O	TRP A 282	10.727	35.210	32.276	1.00	4.90
ATOM	718	N	ARG A 283	12.076	36.519	31.062	1.00	4.82
ATOM	719	CA	ARG A 283	11.030	37.186	30.317	1.00	3.18
ATOM	720	CB	ARG A 283	11.655	38.122	29.275	1.00	3.32
ATOM	721	CG	ARG A 283	12.311	39.366	29.845	1.00	3.74
ATOM	722	CD	ARG A 283	11.319	40.490	30.069	1.00	2.00
ATOM	723	NE	ARG A 283	10.896	41.098	28.808	1.00	2.00
ATOM	724	CZ	ARG A 283	9.994	42.077	28.754	1.00	8.19
ATOM	725	NH1	ARG A 283	9.451	42.530	29.880	1.00	3.11
ATOM	726	NH2	ARG A 283	9.633	42.598	27.585	1.00	8.46
ATOM	727	C	ARG A 283	10.114	36.205	29.599	1.00	2.00
ATOM	728	O	ARG A 283	8.880	36.297	29.641	1.00	2.00
ATOM	729	N	LYS A 284	10.705	35.191	28.960	1.00	2.00
ATOM	730	CA	LYS A 284	9.893	34.189	28.263	1.00	2.00
ATOM	731	CB	LYS A 284	10.775	33.218	27.491	1.00	2.00
ATOM	732	CG	LYS A 284	11.757	33.824	26.483	1.00	2.00
ATOM	733	CD	LYS A 284	12.330	32.681	25.649	1.00	2.00
ATOM	734	CE	LYS A 284	13.729	32.965	25.142	1.00	2.00
ATOM	735	NZ	LYS A 284	14.681	33.198	26.264	1.00	15.50
ATOM	736	C	LYS A 284	8.963	33.497	29.256	1.00	5.65
ATOM	737	O	LYS A 284	7.818	33.168	28.954	1.00	2.00
ATOM	738	N	GLU A 285	9.416	33.281	30.483	1.00	2.00
ATOM	739	CA	GLU A 285	8.709	32.661	31.571	1.00	4.77
ATOM	740	CB	GLU A 285	9.738	32.395	32.693	1.00	2.00
ATOM	741	CG	GLU A 285	10.061	30.935	32.894	1.00	6.22

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ATOM	742	CD	GLU	A	285	10.329	30.122	31.653	1.00	11.59
ATOM	743	OE1	GLU	A	285	11.142	30.522	30.796	1.00	15.16
ATOM	744	OE2	GLU	A	285	9.685	29.051	31.557	1.00	14.92
ATOM	745	C	GLU	A	285	7.553	33.419	32.199	1.00	9.19
ATOM	746	O	GLU	A	285	6.707	32.789	32.848	1.00	21.44
ATOM	747	N	MET	A	286	7.514	34.738	32.093	1.00	10.22
ATOM	748	CA	MET	A	286	6.450	35.530	32.683	1.00	2.00
ATOM	749	CB	MET	A	286	6.916	36.957	32.957	1.00	12.86
ATOM	750	CG	MET	A	286	8.281	37.112	33.596	1.00	14.12
ATOM	751	SD	MET	A	286	8.740	38.861	33.681	1.00	22.96
ATOM	752	CE	MET	A	286	10.002	38.771	34.948	1.00	17.60
ATOM	753	C	MET	A	286	5.221	35.645	31.778	1.00	2.00
ATOM	754	O	MET	A	286	5.260	35.476	30.562	1.00	11.67
ATOM	755	N	THR	A	287	4.125	36.016	32.435	1.00	6.10
ATOM	756	CA	THR	A	287	2.853	36.225	31.765	1.00	4.47
ATOM	757	CB	THR	A	287	1.727	36.263	32.819	1.00	9.90
ATOM	758	OG1	THR	A	287	2.044	37.338	33.716	1.00	2.00
ATOM	759	CG2	THR	A	287	1.650	34.948	33.568	1.00	16.29
ATOM	760	C	THR	A	287	2.849	37.593	31.097	1.00	8.35
ATOM	761	O	THR	A	287	3.461	38.506	31.664	1.00	2.00
ATOM	762	N	ASN	A	288	2.093	37.746	30.016	1.00	10.47
ATOM	763	CA	ASN	A	288	2.000	39.057	29.362	1.00	14.04
ATOM	764	CB	ASN	A	288	0.877	39.015	28.327	1.00	19.24
ATOM	765	CG	ASN	A	288	1.165	37.923	27.303	1.00	19.27
ATOM	766	OD1	ASN	A	288	0.500	36.891	27.240	1.00	28.39
ATOM	767	ND2	ASN	A	288	2.188	38.148	26.491	1.00	15.34
ATOM	768	C	ASN	A	288	1.870	40.149	30.409	1.00	15.86
ATOM	769	O	ASN	A	288	2.750	41.018	30.484	1.00	20.14
ATOM	770	N	GLU	A	289	0.900	40.087	31.309	1.00	11.23
ATOM	771	CA	GLU	A	289	0.749	41.012	32.414	1.00	15.15
ATOM	772	CB	GLU	A	289	-0.123	40.393	33.518	1.00	20.42
ATOM	773	CG	GLU	A	289	-1.537	40.024	33.150	1.00	30.87
ATOM	774	CD	GLU	A	289	-1.651	38.802	32.263	1.00	38.34
ATOM	775	OE1	GLU	A	289	-1.589	38.965	31.024	1.00	42.68
ATOM	776	OE2	GLU	A	289	-1.793	37.685	32.801	1.00	41.58
ATOM	777	C	GLU	A	289	2.074	41.364	33.093	1.00	11.58
ATOM	778	O	GLU	A	289	2.443	42.523	33.261	1.00	16.35
ATOM	779	N	GLU	A	290	2.770	40.332	33.563	1.00	13.66
ATOM	780	CA	GLU	A	290	4.043	40.490	34.255	1.00	7.91
ATOM	781	CB	GLU	A	290	4.538	39.135	34.763	1.00	8.66
ATOM	782	CG	GLU	A	290	3.754	38.602	35.953	1.00	9.07
ATOM	783	CD	GLU	A	290	3.986	37.135	36.246	1.00	13.26
ATOM	784	OE1	GLU	A	290	3.778	36.734	37.415	1.00	10.03
ATOM	785	OE2	GLU	A	290	4.367	36.360	35.342	1.00	13.09
ATOM	786	C	GLU	A	290	5.065	41.167	33.356	1.00	11.68
ATOM	787	O	GLU	A	290	5.568	42.236	33.715	1.00	17.52
ATOM	788	N	LYS	A	291	5.320	40.608	32.176	1.00	9.30
ATOM	789	CA	LYS	A	291	6.265	41.176	31.234	1.00	2.00
ATOM	790	CB	LYS	A	291	6.112	40.587	29.827	1.00	10.74
ATOM	791	CG	LYS	A	291	6.296	39.088	29.718	1.00	12.22
ATOM	792	CD	LYS	A	291	6.932	38.631	28.421	1.00	2.00
ATOM	793	CE	LYS	A	291	6.100	38.925	27.189	1.00	2.00
ATOM	794	NZ	LYS	A	291	6.107	37.773	26.235	1.00	11.16
ATOM	795	C	LYS	A	291	6.158	42.693	31.111	1.00	6.17
ATOM	796	O	LYS	A	291	7.162	43.382	31.332	1.00	6.25
ATOM	797	N	ASN	A	292	4.987	43.244	30.789	1.00	2.58
ATOM	798	CA	ASN	A	292	4.861	44.697	30.647	1.00	2.00
ATOM	799	CB	ASN	A	292	3.472	45.105	30.188	1.00	6.52
ATOM	800	CG	ASN	A	292	3.001	44.525	28.874	1.00	12.56
ATOM	801	OD1	ASN	A	292	3.625	44.642	27.818	1.00	2.00
ATOM	802	ND2	ASN	A	292	1.824	43.896	28.916	1.00	20.35
ATOM	803	C	ASN	A	292	5.303	45.433	31.904	1.00	8.46
ATOM	804	O	ASN	A	292	5.894	46.509	31.745	1.00	17.65

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ATOM	805	N	ILE A 293	5.063	44.930	33.108	1.00	3.88
ATOM	806	CA	ILE A 293	5.526	45.558	34.336	1.00	2.37
ATOM	807	CB	ILE A 293	4.941	44.857	35.582	1.00	9.17
ATOM	808	CG2	ILE A 293	5.686	45.234	36.857	1.00	7.32
ATOM	809	CG1	ILE A 293	3.441	45.137	35.727	1.00	5.78
ATOM	810	CD1	ILE A 293	2.784	44.344	36.843	1.00	2.00
ATOM	811	C	ILE A 293	7.053	45.485	34.449	1.00	8.37
ATOM	812	O	ILE A 293	7.737	46.496	34.601	1.00	7.69
ATOM	813	N	ILE A 294	7.572	44.263	34.412	1.00	2.00
ATOM	814	CA	ILE A 294	8.989	43.956	34.554	1.00	3.62
ATOM	815	CB	ILE A 294	9.131	42.477	35.003	1.00	2.00
ATOM	816	CG2	ILE A 294	10.584	42.042	34.994	1.00	2.00
ATOM	817	CG1	ILE A 294	8.536	42.367	36.410	1.00	2.00
ATOM	818	CD1	ILE A 294	8.725	41.060	37.135	1.00	2.00
ATOM	819	C	ILE A 294	9.835	44.247	33.325	1.00	6.44
ATOM	820	O	ILE A 294	10.115	43.400	32.467	1.00	7.18
ATOM	821	N	THR A 295	10.334	45.485	33.233	1.00	2.00
ATOM	822	CA	THR A 295	11.129	45.915	32.089	1.00	2.00
ATOM	823	CB	THR A 295	10.888	47.395	31.740	1.00	2.00
ATOM	824	OG1	THR A 295	11.640	48.225	32.635	1.00	4.74
ATOM	825	CG2	THR A 295	9.415	47.751	31.885	1.00	11.59
ATOM	826	C	THR A 295	12.627	45.713	32.274	1.00	11.93
ATOM	827	O	THR A 295	13.353	45.797	31.278	1.00	19.09
ATOM	828	N	ASN A 296	13.088	45.445	33.494	1.00	7.04
ATOM	829	CA	ASN A 296	14.505	45.276	33.765	1.00	6.36
ATOM	830	CB	ASN A 296	15.163	46.668	33.852	1.00	11.10
ATOM	831	CG	ASN A 296	14.695	47.413	35.092	1.00	15.69
ATOM	832	OD1	ASN A 296	15.442	47.646	36.046	1.00	14.81
ATOM	833	ND2	ASN A 296	13.422	47.789	35.107	1.00	15.32
ATOM	834	C	ASN A 296	14.809	44.547	35.066	1.00	3.30
ATOM	835	O	ASN A 296	14.043	44.528	36.027	1.00	5.74
ATOM	836	N	LEU A 297	15.999	43.947	35.131	1.00	9.68
ATOM	837	CA	LEU A 297	16.446	43.191	36.286	1.00	4.85
ATOM	838	CB	LEU A 297	17.595	42.236	35.932	1.00	3.75
ATOM	839	CG	LEU A 297	18.009	41.275	37.056	1.00	2.13
ATOM	840	CD1	LEU A 297	16.901	40.247	37.224	1.00	2.00
ATOM	841	CD2	LEU A 297	19.352	40.632	36.796	1.00	2.00
ATOM	842	C	LEU A 297	16.934	44.079	37.418	1.00	6.80
ATOM	843	O	LEU A 297	16.867	43.688	38.585	1.00	18.30
ATOM	844	N	SER A 298	17.455	45.254	37.095	1.00	4.24
ATOM	845	CA	SER A 298	17.978	46.159	38.112	1.00	6.29
ATOM	846	CB	SER A 298	18.524	47.441	37.477	1.00	10.94
ATOM	847	OG	SER A 298	19.719	47.184	36.748	1.00	14.51
ATOM	848	C	SER A 298	16.968	46.505	39.188	1.00	6.45
ATOM	849	O	SER A 298	17.227	46.279	40.373	1.00	15.23
ATOM	850	N	LYS A 299	15.787	46.987	38.830	1.00	5.75
ATOM	851	CA	LYS A 299	14.762	47.394	39.776	1.00	2.00
ATOM	852	CB	LYS A 299	13.693	48.166	38.984	1.00	2.00
ATOM	853	CG	LYS A 299	13.498	49.590	39.484	1.00	2.00
ATOM	854	CD	LYS A 299	14.193	50.554	38.532	1.00	2.00
ATOM	855	CE	LYS A 299	13.671	51.969	38.701	1.00	2.00
ATOM	856	NZ	LYS A 299	12.192	52.022	38.557	1.00	8.52
ATOM	857	C	LYS A 299	14.082	46.296	40.577	1.00	12.43
ATOM	858	O	LYS A 299	13.308	46.602	41.501	1.00	11.14
ATOM	859	N	CYS A 300	14.288	45.027	40.239	1.00	11.53
ATOM	860	CA	CYS A 300	13.668	43.928	40.971	1.00	9.81
ATOM	861	CB	CYS A 300	13.821	42.612	40.209	1.00	8.91
ATOM	862	SG	CYS A 300	13.125	42.641	38.536	1.00	20.80
ATOM	863	C	CYS A 300	14.307	43.827	42.349	1.00	11.67
ATOM	864	O	CYS A 300	15.441	44.280	42.525	1.00	23.27
ATOM	865	N	ASP A 301	13.590	43.267	43.314	1.00	10.10
ATOM	866	CA	ASP A 301	14.145	43.105	44.653	1.00	11.89
ATOM	867	CB	ASP A 301	13.519	44.091	45.643	1.00	13.25

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ATOM	868	CG	ASP	A	301	14.311	44.141	46.943	1.00	24.12
ATOM	869	OD1	ASP	A	301	15.513	43.788	46.909	1.00	26.51
ATOM	870	OD2	ASP	A	301	13.752	44.529	47.990	1.00	23.20
ATOM	871	C	ASP	A	301	13.978	41.676	45.154	1.00	11.26
ATOM	872	C	ASP	A	301	12.942	41.327	45.719	1.00	20.98
ATOM	873	N	PHE	A	302	15.000	40.839	45.008	1.00	12.69
ATOM	874	CA	PHE	A	302	14.945	39.452	45.442	1.00	10.23
ATOM	875	CB	PHE	A	302	15.802	38.556	44.537	1.00	5.73
ATOM	876	CG	PHE	A	302	15.521	38.616	43.063	1.00	2.00
ATOM	877	CD1	PHE	A	302	14.635	37.754	42.441	1.00	2.00
ATOM	878	CD2	PHE	A	302	16.176	39.552	42.274	1.00	2.00
ATOM	879	CE1	PHE	A	302	14.395	37.829	41.084	1.00	2.00
ATOM	880	CE2	PHE	A	302	15.947	39.633	40.915	1.00	2.00
ATOM	881	CZ	PHE	A	302	15.054	38.770	40.317	1.00	2.00
ATOM	882	C	PHE	A	302	15.374	39.265	46.893	1.00	14.63
ATOM	883	O	PHE	A	302	15.422	38.118	47.358	1.00	20.31
ATOM	884	N	THR	A	303	15.637	40.327	47.647	1.00	13.33
ATOM	885	CA	THR	A	303	16.121	40.209	49.012	1.00	13.26
ATOM	886	CB	THR	A	303	16.266	41.555	49.757	1.00	13.43
ATOM	887	OG1	THR	A	303	15.000	42.205	49.899	1.00	19.78
ATOM	888	CG2	THR	A	303	17.251	42.440	49.009	1.00	15.76
ATOM	889	C	THR	A	303	15.369	39.246	49.909	1.00	10.65
ATOM	890	O	THR	A	303	16.027	38.370	50.489	1.00	18.80
ATOM	891	N	GLN	A	304	14.057	39.333	50.068	1.00	8.50
ATOM	892	CA	GLN	A	304	13.321	38.433	50.954	1.00	2.00
ATOM	893	CB	GLN	A	304	11.905	38.958	51.200	1.00	10.65
ATOM	894	CG	GLN	A	304	11.828	40.042	52.265	1.00	19.47
ATOM	895	CD	GLN	A	304	10.403	40.476	52.545	1.00	27.67
ATOM	896	OE1	GLN	A	304	9.596	39.702	53.067	1.00	29.83
ATOM	897	NE2	GLN	A	304	10.080	41.719	52.196	1.00	29.04
ATOM	898	C	GLN	A	304	13.272	36.995	50.456	1.00	4.79
ATOM	899	O	GLN	A	304	13.055	36.074	51.252	1.00	2.00
ATOM	900	N	MET	A	305	13.430	36.778	49.152	1.00	2.00
ATOM	901	CA	MET	A	305	13.470	35.413	48.633	1.00	4.69
ATOM	902	CB	MET	A	305	13.167	35.326	47.142	1.00	2.00
ATOM	903	CG	MET	A	305	11.653	35.261	46.919	1.00	8.31
ATOM	904	SD	MET	A	305	11.160	35.756	45.265	1.00	16.99
ATOM	905	CE	MET	A	305	11.938	34.471	44.293	1.00	10.88
ATOM	906	C	MET	A	305	14.827	34.838	49.015	1.00	9.13
ATOM	907	O	MET	A	305	14.872	33.764	49.611	1.00	11.69
ATOM	908	N	SER	A	306	15.907	35.589	48.810	1.00	14.71
ATOM	909	CA	SER	A	306	17.234	35.123	49.197	1.00	9.49
ATOM	910	CB	SER	A	306	18.324	36.132	48.835	1.00	2.76
ATOM	911	OG	SER	A	306	19.576	35.616	49.267	1.00	8.47
ATOM	912	C	SER	A	306	17.310	34.825	50.692	1.00	15.69
ATOM	913	O	SER	A	306	17.718	33.720	51.069	1.00	19.33
ATOM	914	N	GLN	A	307	16.905	35.782	51.532	1.00	12.24
ATOM	915	CA	GLN	A	307	16.932	35.540	52.973	1.00	13.48
ATOM	916	CB	GLN	A	307	16.288	36.650	53.794	1.00	13.02
ATOM	917	CG	GLN	A	307	16.942	38.014	53.662	1.00	21.67
ATOM	918	CD	GLN	A	307	16.342	39.062	54.578	1.00	29.46
ATOM	919	OE1	GLN	A	307	15.226	38.922	55.085	1.00	27.53
ATOM	920	NE2	GLN	A	307	17.080	40.146	54.814	1.00	32.77
ATOM	921	C	GLN	A	307	16.247	34.200	53.237	1.00	17.08
ATOM	922	O	GLN	A	307	16.908	33.265	53.693	1.00	20.71
ATOM	923	N	TYR	A	308	14.976	34.086	52.869	1.00	14.88
ATOM	924	CA	TYR	A	308	14.187	32.883	53.049	1.00	15.99
ATOM	925	CB	TYR	A	308	12.974	32.873	52.113	1.00	22.00
ATOM	926	CG	TYR	A	308	12.107	31.637	52.233	1.00	27.02
ATOM	927	CD1	TYR	A	308	11.952	30.767	51.163	1.00	27.05
ATOM	928	CE1	TYR	A	308	11.156	29.640	51.275	1.00	31.06
ATOM	929	CD2	TYR	A	308	11.447	31.339	53.419	1.00	29.32
ATOM	930	CE2	TYR	A	308	10.651	30.216	53.537	1.00	29.31



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ATOM	931	CZ	TYR	A	308	10.507	29.369	52.460	1.00	29.75
ATOM	932	OH	TYR	A	308	9.715	28.248	52.555	1.00	31.44
ATOM	933	C	TYR	A	308	14.965	31.597	52.807	1.00	21.53
ATOM	934	O	TYR	A	308	15.099	30.759	53.704	1.00	25.01
ATOM	935	N	PHE	A	309	15.469	31.444	51.584	1.00	20.20
ATOM	936	CA	PHE	A	309	16.253	30.248	51.257	1.00	18.64
ATOM	937	CB	PHE	A	309	16.650	30.292	49.777	1.00	8.71
ATOM	938	CG	PHE	A	309	15.388	30.140	48.950	1.00	8.09
ATOM	939	CD1	PHE	A	309	14.815	28.892	48.776	1.00	2.00
ATOM	940	CD2	PHE	A	309	14.765	31.233	48.380	1.00	2.00
ATOM	941	CE1	PHE	A	309	13.660	28.739	48.034	1.00	2.00
ATOM	942	CE2	PHE	A	309	13.611	31.090	47.638	1.00	2.00
ATOM	943	CZ	PHE	A	309	13.050	29.837	47.465	1.00	2.00
ATOM	944	C	PHE	A	309	17.380	30.058	52.247	1.00	21.34
ATOM	945	O	PHE	A	309	17.430	28.976	52.857	1.00	31.16
ATOM	946	N	LYS	A	310	18.187	31.067	52.562	1.00	14.20
ATOM	947	CA	LYS	A	310	19.227	30.922	53.581	1.00	18.57
ATOM	948	CB	LYS	A	310	19.936	32.255	53.820	1.00	22.62
ATOM	949	CG	LYS	A	310	20.645	32.814	52.592	1.00	24.04
ATOM	950	CD	LYS	A	310	20.935	34.297	52.779	1.00	22.98
ATOM	951	CE	LYS	A	310	21.555	34.897	51.528	1.00	26.87
ATOM	952	NZ	LYS	A	310	21.499	36.388	51.554	1.00	33.80
ATOM	953	C	LYS	A	310	18.648	30.407	54.898	1.00	17.39
ATOM	954	O	LYS	A	310	19.178	29.497	55.541	1.00	8.69
ATOM	955	N	ALA	A	311	17.515	30.975	55.311	1.00	16.69
ATOM	956	CA	ALA	A	311	16.820	30.533	56.514	1.00	20.78
ATOM	957	CB	ALA	A	311	15.537	31.322	56.710	1.00	18.01
ATOM	958	C	ALA	A	311	16.516	29.041	56.423	1.00	22.00
ATOM	959	O	ALA	A	311	16.855	28.273	57.329	1.00	28.87
ATOM	960	N	GLN	A	312	15.953	28.599	55.297	1.00	15.78
ATOM	961	CA	GLN	A	312	15.653	27.186	55.107	1.00	20.96
ATOM	962	CB	GLN	A	312	14.888	26.945	53.806	1.00	22.84
ATOM	963	CG	GLN	A	312	13.539	27.640	53.744	1.00	32.84
ATOM	964	CD	GLN	A	312	12.591	27.281	54.868	1.00	31.82
ATOM	965	OE1	GLN	A	312	11.730	26.410	54.714	1.00	35.21
ATOM	966	NE2	GLN	A	312	12.728	27.947	56.013	1.00	28.53
ATOM	967	C	GLN	A	312	16.882	26.293	55.160	1.00	23.65
ATOM	968	O	GLN	A	312	16.750	25.136	55.565	1.00	27.05
ATOM	969	N	THR	A	313	18.063	26.781	54.792	1.00	23.19
ATOM	970	CA	THR	A	313	19.274	25.970	54.870	1.00	23.70
ATOM	971	CB	THR	A	313	20.405	26.485	53.969	1.00	19.49
ATOM	972	OG1	THR	A	313	19.937	26.612	52.615	1.00	8.25
ATOM	973	CG2	THR	A	313	21.587	25.525	53.984	1.00	2.00
ATOM	974	C	THR	A	313	19.729	25.895	56.326	1.00	30.36
ATOM	975	O	THR	A	313	20.354	24.917	56.733	1.00	36.38
ATOM	976	N	GLU	A	314	19.391	26.915	57.111	1.00	32.58
ATOM	977	CA	GLU	A	314	19.731	26.939	58.528	1.00	31.34
ATOM	978	CB	GLU	A	314	19.620	28.352	59.099	1.00	30.06
ATOM	979	CG	GLU	A	314	20.832	29.226	58.811	1.00	34.13
ATOM	980	CD	GLU	A	314	22.023	28.857	59.675	1.00	37.39
ATOM	981	OE1	GLU	A	314	22.687	27.842	59.376	1.00	35.96
ATOM	982	OE2	GLU	A	314	22.306	29.568	60.663	1.00	45.89
ATOM	983	C	GLU	A	314	18.835	25.985	59.307	1.00	29.06
ATOM	984	O	GLU	A	314	19.313	25.231	60.154	1.00	35.78
ATOM	985	N	ALA	A	315	17.544	25.979	58.989	1.00	29.04
ATOM	986	CA	ALA	A	315	16.607	25.089	59.675	1.00	33.73
ATOM	987	CB	ALA	A	315	15.177	25.418	59.270	1.00	32.79
ATOM	988	C	ALA	A	315	16.928	23.625	59.392	1.00	33.66
ATOM	989	O	ALA	A	315	16.866	22.764	60.273	1.00	33.27
ATOM	990	N	ARG	A	316	17.323	23.323	58.160	1.00	32.47
ATOM	991	CA	ARG	A	316	17.654	21.986	57.709	1.00	33.60
ATOM	992	CB	ARG	A	316	17.889	21.970	56.186	1.00	29.86
ATOM	993	CG	ARG	A	316	16.614	22.193	55.397	1.00	32.44

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ATOM	994	CD	ARG	A	316	16.738	22.086	53.900	1.00	38.06
ATOM	995	NE	ARG	A	316	17.723	22.945	53.270	1.00	40.28
ATOM	996	CZ	ARG	A	316	18.950	22.586	52.904	1.00	45.11
ATOM	997	NH1	ARG	A	316	19.780	23.454	52.332	1.00	45.19
ATOM	998	NH2	ARG	A	316	19.377	21.341	53.092	1.00	42.14
ATOM	999	C	ARG	A	316	18.829	21.337	58.420	1.00	34.73
ATOM	1000	O	ARG	A	316	18.860	20.102	58.530	1.00	35.99
ATOM	1001	N	LYS	A	317	19.781	22.102	58.945	1.00	31.21
ATOM	1002	CA	LYS	A	317	20.903	21.534	59.683	1.00	30.93
ATOM	1003	CB	LYS	A	317	22.216	22.273	59.416	1.00	30.06
ATOM	1004	CG	LYS	A	317	22.152	23.779	59.578	1.00	34.72
ATOM	1005	CD	LYS	A	317	23.508	24.455	59.543	1.00	35.16
ATOM	1006	CE	LYS	A	317	24.230	24.340	60.877	1.00	38.38
ATOM	1007	NZ	LYS	A	317	25.350	25.318	60.986	1.00	34.85
ATOM	1008	C	LYS	A	317	20.604	21.511	61.183	1.00	34.14
ATOM	1009	O	LYS	A	317	21.507	21.318	62.001	1.00	35.36
ATOM	1010	N	GLN	A	318	19.343	21.718	61.551	1.00	26.99
ATOM	1011	CA	GLN	A	318	18.905	21.721	62.933	1.00	30.52
ATOM	1012	CB	GLN	A	318	18.295	23.069	63.319	1.00	34.26
ATOM	1013	CG	GLN	A	318	19.234	24.257	63.255	1.00	36.97
ATOM	1014	CD	GLN	A	318	20.181	24.337	64.432	1.00	43.32
ATOM	1015	OE1	GLN	A	318	20.282	25.394	65.061	1.00	49.22
ATOM	1016	NE2	GLN	A	318	20.874	23.246	64.741	1.00	43.86
ATOM	1017	C	GLN	A	318	17.878	20.615	63.169	1.00	31.03
ATOM	1018	O	GLN	A	318	17.472	20.356	64.301	1.00	31.50
ATOM	1019	N	MET	A	319	17.473	19.972	62.080	1.00	33.10
ATOM	1020	CA	MET	A	319	16.485	18.901	62.144	1.00	36.14
ATOM	1021	CB	MET	A	319	16.325	18.238	60.772	1.00	37.19
ATOM	1022	CG	MET	A	319	15.868	19.173	59.664	1.00	38.91
ATOM	1023	SD	MET	A	319	15.390	18.337	58.138	1.00	42.17
ATOM	1024	CE	MET	A	319	16.954	17.614	57.632	1.00	33.92
ATOM	1025	C	MET	A	319	16.835	17.857	63.200	1.00	36.45
ATOM	1026	O	MET	A	319	17.976	17.722	63.644	1.00	30.81
ATOM	1027	N	SER	A	320	15.822	17.100	63.612	1.00	37.03
ATOM	1028	CA	SER	A	320	15.978	16.048	64.604	1.00	38.61
ATOM	1029	CB	SER	A	320	14.599	15.679	65.170	1.00	42.34
ATOM	1030	OG	SER	A	320	13.829	15.011	64.180	1.00	38.18
ATOM	1031	C	SER	A	320	16.595	14.792	63.997	1.00	38.88
ATOM	1032	O	SER	A	320	16.846	14.726	62.792	1.00	37.97
ATOM	1033	N	LYS	A	321	16.781	13.770	64.833	1.00	38.70
ATOM	1034	CA	LYS	A	321	17.311	12.498	64.344	1.00	40.90
ATOM	1035	CB	LYS	A	321	17.816	11.614	65.478	1.00	43.28
ATOM	1036	CG	LYS	A	321	19.280	11.815	65.834	1.00	46.28
ATOM	1037	CD	LYS	A	321	19.873	10.561	66.463	1.00	48.00
ATOM	1038	CE	LYS	A	321	19.906	9.404	65.476	1.00	49.01
ATOM	1039	NZ	LYS	A	321	20.682	8.241	65.983	1.00	45.55
ATOM	1040	C	LYS	A	321	16.216	11.773	63.562	1.00	40.47
ATOM	1041	O	LYS	A	321	16.455	11.137	62.542	1.00	36.99
ATOM	1042	N	GLU	A	322	14.992	11.909	64.058	1.00	38.35
ATOM	1043	CA	GLU	A	322	13.805	11.321	63.462	1.00	41.81
ATOM	1044	CB	GLU	A	322	12.568	11.654	64.302	1.00	44.63
ATOM	1045	CG	GLU	A	322	12.557	11.096	65.713	1.00	47.19
ATOM	1046	CD	GLU	A	322	13.509	11.799	66.659	1.00	51.22
ATOM	1047	OE1	GLU	A	322	13.343	13.019	66.872	1.00	49.55
ATOM	1048	OE2	GLU	A	322	14.435	11.141	67.183	1.00	56.88
ATOM	1049	C	GLU	A	322	13.622	11.810	62.028	1.00	41.43
ATOM	1050	O	GLU	A	322	13.464	11.017	61.101	1.00	36.58
ATOM	1051	N	GLU	A	323	13.665	13.127	61.844	1.00	42.08
ATOM	1052	CA	GLU	A	323	13.534	13.753	60.539	1.00	41.08
ATOM	1053	CB	GLU	A	323	13.504	15.278	60.663	1.00	41.89
ATOM	1054	CG	GLU	A	323	12.292	15.872	61.346	1.00	47.22
ATOM	1055	CD	GLU	A	323	11.076	15.948	60.444	1.00	49.66
ATOM	1056	OE1	GLU	A	323	10.547	17.063	60.237	1.00	50.19

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ATOM	1057	OE2	GLU	A	323	10.639	14.893	59.937	1.00	50.38
ATOM	1058	C	GLU	A	323	14.696	13.378	59.621	1.00	44.62
ATOM	1059	O	GLU	A	323	14.501	13.030	58.457	1.00	47.97
ATOM	1060	N	LYS	A	324	15.914	13.478	60.149	1.00	42.19
ATOM	1061	CA	LYS	A	324	17.114	13.161	59.389	1.00	37.62
ATOM	1062	CB	LYS	A	324	18.368	13.470	60.209	1.00	37.77
ATOM	1063	CG	LYS	A	324	18.992	14.824	59.917	1.00	38.90
ATOM	1064	CD	LYS	A	324	19.504	14.911	58.486	1.00	40.39
ATOM	1065	CE	LYS	A	324	20.624	13.920	58.226	1.00	45.81
ATOM	1066	NZ	LYS	A	324	21.168	13.986	56.842	1.00	42.54
ATOM	1067	C	LYS	A	324	17.148	11.713	58.925	1.00	36.40
ATOM	1068	O	LYS	A	324	17.369	11.439	57.745	1.00	44.28
ATOM	1069	N	LEU	A	325	16.910	10.785	59.842	1.00	33.37
ATOM	1070	CA	LEU	A	325	16.908	9.364	59.533	1.00	32.80
ATOM	1071	CB	LEU	A	325	16.757	8.546	60.820	1.00	31.88
ATOM	1072	CG	LEU	A	325	17.065	7.052	60.678	1.00	35.33
ATOM	1073	CD1	LEU	A	325	18.568	6.816	60.684	1.00	34.63
ATOM	1074	CD2	LEU	A	325	16.370	6.258	61.772	1.00	36.71
ATOM	1075	C	LEU	A	325	15.804	8.977	58.558	1.00	38.06
ATOM	1076	O	LEU	A	325	16.022	8.128	57.688	1.00	48.03
ATOM	1077	N	LYS	A	326	14.624	9.583	58.679	1.00	32.86
ATOM	1078	CA	LYS	A	326	13.517	9.299	57.775	1.00	26.88
ATOM	1079	CB	LYS	A	326	12.253	10.047	58.190	1.00	31.45
ATOM	1080	CG	LYS	A	326	11.103	9.916	57.201	1.00	35.08
ATOM	1081	CD	LYS	A	326	9.971	10.876	57.536	1.00	39.74
ATOM	1082	CE	LYS	A	326	8.711	10.537	56.753	1.00	41.56
ATOM	1083	NZ	LYS	A	326	8.960	10.554	55.284	1.00	42.83
ATOM	1084	C	LYS	A	326	13.900	9.682	56.349	1.00	27.93
ATOM	1085	O	LYS	A	326	13.739	8.910	55.405	1.00	29.12
ATOM	1086	N	ILE	A	327	14.477	10.872	56.203	1.00	25.21
ATOM	1087	CA	ILE	A	327	14.960	11.374	54.916	1.00	23.90
ATOM	1088	CB	ILE	A	327	15.578	12.769	55.117	1.00	19.47
ATOM	1089	CG2	ILE	A	327	16.805	13.041	54.267	1.00	17.87
ATOM	1090	CG1	ILE	A	327	14.495	13.824	54.846	1.00	17.04
ATOM	1091	CD1	ILE	A	327	14.780	15.173	55.462	1.00	20.09
ATOM	1092	C	ILE	A	327	15.927	10.385	54.284	1.00	30.03
ATOM	1093	O	ILE	A	327	15.887	10.107	53.083	1.00	34.63
ATOM	1094	N	LYS	A	328	16.820	9.831	55.100	1.00	26.65
ATOM	1095	CA	LYS	A	328	17.775	8.829	54.669	1.00	28.81
ATOM	1096	CB	LYS	A	328	18.671	8.442	55.849	1.00	31.81
ATOM	1097	CG	LYS	A	328	19.902	7.643	55.438	1.00	38.08
ATOM	1098	CD	LYS	A	328	21.084	7.970	56.347	1.00	37.16
ATOM	1099	CE	LYS	A	328	21.599	9.374	56.066	1.00	39.05
ATOM	1100	NZ	LYS	A	328	22.435	9.915	57.171	1.00	40.87
ATOM	1101	C	LYS	A	328	17.059	7.591	54.141	1.00	29.53
ATOM	1102	O	LYS	A	328	17.332	7.105	53.042	1.00	32.79
ATOM	1103	N	GLU	A	329	16.089	7.105	54.912	1.00	27.30
ATOM	1104	CA	GLU	A	329	15.319	5.925	54.540	1.00	30.55
ATOM	1105	CB	GLU	A	329	14.415	5.479	55.694	1.00	32.37
ATOM	1106	CG	GLU	A	329	15.201	5.008	56.907	1.00	40.62
ATOM	1107	CD	GLU	A	329	14.466	4.004	57.771	1.00	46.72
ATOM	1108	OE1	GLU	A	329	13.217	4.029	57.803	1.00	45.33
ATOM	1109	OE2	GLU	A	329	15.137	3.174	58.428	1.00	50.86
ATOM	1110	C	GLU	A	329	14.515	6.105	53.264	1.00	28.02
ATOM	1111	O	GLU	A	329	14.375	5.154	52.487	1.00	32.25
ATOM	1112	N	GLU	A	330	14.010	7.307	53.007	1.00	26.46
ATOM	1113	CA	GLU	A	330	13.264	7.568	51.776	1.00	26.20
ATOM	1114	CB	GLU	A	330	12.607	8.942	51.829	1.00	24.64
ATOM	1115	CG	GLU	A	330	11.749	9.188	53.055	1.00	36.32
ATOM	1116	CD	GLU	A	330	10.409	8.483	53.048	1.00	40.16
ATOM	1117	OE1	GLU	A	330	10.074	7.795	54.039	1.00	42.38
ATOM	1118	OE2	GLU	A	330	9.663	8.616	52.053	1.00	41.67
ATOM	1119	C	GLU	A	330	14.199	7.441	50.576	1.00	26.64

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ATOM	1120	O	GLU A 330	13.859	6.824	49.565	1.00	23.94
ATOM	1121	N	ASN A 331	15.418	7.964	50.710	1.00	24.24
ATOM	1122	CA	ASN A 331	16.429	7.904	49.668	1.00	21.46
ATOM	1123	CB	ASN A 331	17.615	8.809	49.990	1.00	23.63
ATOM	1124	CG	ASN A 331	17.346	10.294	49.941	1.00	28.83
ATOM	1125	OD1	ASN A 331	18.301	11.085	49.943	1.00	26.06
ATOM	1126	ND2	ASN A 331	16.081	10.698	49.899	1.00	22.86
ATOM	1127	C	ASN A 331	16.958	6.487	49.463	1.00	24.26
ATOM	1128	O	ASN A 331	17.386	6.132	48.365	1.00	26.85
ATOM	1129	N	GLU A 332	16.945	5.689	50.524	1.00	24.54
ATOM	1130	CA	GLU A 332	17.406	4.312	50.473	1.00	22.85
ATOM	1131	CB	GLU A 332	17.616	3.795	51.898	1.00	22.88
ATOM	1132	CG	GLU A 332	18.800	4.470	52.583	1.00	24.30
ATOM	1133	CD	GLU A 332	19.230	3.692	53.812	1.00	29.15
ATOM	1134	OE1	GLU A 332	18.426	3.631	54.765	1.00	31.69
ATOM	1135	OE2	GLU A 332	20.351	3.143	53.808	1.00	27.22
ATOM	1136	C	GLU A 332	16.446	3.403	49.720	1.00	24.84
ATOM	1137	O	GLU A 332	16.902	2.531	48.978	1.00	29.27
ATOM	1138	N	LYS A 333	15.141	3.631	49.867	1.00	23.09
ATOM	1139	CA	LYS A 333	14.164	2.822	49.143	1.00	24.42
ATOM	1140	CB	LYS A 333	12.774	2.856	49.772	1.00	24.78
ATOM	1141	CG	LYS A 333	11.942	4.088	49.464	1.00	26.72
ATOM	1142	CD	LYS A 333	10.484	3.731	49.214	1.00	26.63
ATOM	1143	CE	LYS A 333	9.740	4.878	48.551	1.00	28.19
ATOM	1144	NZ	LYS A 333	8.314	4.544	48.278	1.00	31.57
ATOM	1145	C	LYS A 333	14.086	3.280	47.687	1.00	20.04
ATOM	1146	O	LYS A 333	13.795	2.512	46.776	1.00	22.11
ATOM	1147	N	LEU A 334	14.363	4.560	47.467	1.00	19.02
ATOM	1148	CA	LEU A 334	14.343	5.167	46.142	1.00	20.20
ATOM	1149	CB	LEU A 334	14.560	6.672	46.286	1.00	15.88
ATOM	1150	CG	LEU A 334	13.778	7.599	45.366	1.00	13.41
ATOM	1151	CD1	LEU A 334	12.292	7.527	45.685	1.00	19.64
ATOM	1152	CD2	LEU A 334	14.271	9.031	45.515	1.00	18.06
ATOM	1153	C	LEU A 334	15.444	4.567	45.270	1.00	25.55
ATOM	1154	O	LEU A 334	15.269	4.295	44.084	1.00	31.22
ATOM	1155	N	LEU A 335	16.596	4.367	45.904	1.00	14.68
ATOM	1156	CA	LEU A 335	17.758	3.764	45.266	1.00	10.19
ATOM	1157	CB	LEU A 335	18.957	3.963	46.175	1.00	12.50
ATOM	1158	CG	LEU A 335	20.344	3.418	45.900	1.00	4.34
ATOM	1159	CD1	LEU A 335	20.596	2.159	46.719	1.00	2.00
ATOM	1160	CD2	LEU A 335	20.581	3.143	44.423	1.00	2.00
ATOM	1161	C	LEU A 335	17.491	2.305	44.924	1.00	11.03
ATOM	1162	O	LEU A 335	17.782	1.890	43.794	1.00	15.06
ATOM	1163	N	LYS A 336	16.906	1.530	45.835	1.00	7.84
ATOM	1164	CA	LYS A 336	16.592	0.136	45.547	1.00	7.80
ATOM	1165	CB	LYS A 336	15.866	-0.544	46.705	1.00	15.01
ATOM	1166	CG	LYS A 336	16.357	-0.264	48.105	1.00	23.79
ATOM	1167	CD	LYS A 336	17.808	-0.645	48.336	1.00	27.44
ATOM	1168	CE	LYS A 336	18.260	-0.319	49.751	1.00	24.47
ATOM	1169	NZ	LYS A 336	19.634	-0.832	50.021	1.00	21.90
ATOM	1170	C	LYS A 336	15.698	0.011	44.309	1.00	18.51
ATOM	1171	O	LYS A 336	15.999	-0.725	43.370	1.00	24.01
ATOM	1172	N	GLU A 337	14.573	0.715	44.322	1.00	17.39
ATOM	1173	CA	GLU A 337	13.585	0.678	43.268	1.00	20.23
ATOM	1174	CB	GLU A 337	12.334	1.462	43.713	1.00	26.08
ATOM	1175	CG	GLU A 337	11.335	0.672	44.532	1.00	36.77
ATOM	1176	CD	GLU A 337	11.759	0.425	45.964	1.00	41.28
ATOM	1177	OE1	GLU A 337	12.700	-0.371	46.185	1.00	42.28
ATOM	1178	OE2	GLU A 337	11.141	1.036	46.865	1.00	41.69
ATOM	1179	C	GLU A 337	14.003	1.222	41.913	1.00	21.59
ATOM	1180	O	GLU A 337	13.625	0.641	40.887	1.00	21.38
ATOM	1181	N	TYR A 338	14.684	2.365	41.864	1.00	22.55
ATOM	1182	CA	TYR A 338	15.019	2.978	40.580	1.00	17.27

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ATOM	1183	CB	TYR	A	338	14.478	4.418	40.551	1.00	4.08
ATOM	1184	CG	TYR	A	338	12.969	4.517	40.574	1.00	7.51
ATOM	1185	CD1	TYR	A	338	12.256	4.646	39.388	1.00	2.00
ATOM	1186	CE1	TYR	A	338	10.876	4.730	39.376	1.00	5.30
ATOM	1187	CD2	TYR	A	338	12.256	4.487	41.766	1.00	2.00
ATOM	1188	CE2	TYR	A	338	10.877	4.573	41.765	1.00	10.36
ATOM	1189	CZ	TYR	A	338	10.193	4.699	40.572	1.00	10.49
ATOM	1190	OH	TYR	A	338	8.820	4.785	40.558	1.00	14.96
ATOM	1191	C	TYR	A	338	16.497	3.001	40.236	1.00	22.03
ATOM	1192	O	TYR	A	338	16.852	3.293	39.086	1.00	22.12
ATOM	1193	N	GLY	A	339	17.381	2.690	41.177	1.00	24.29
ATOM	1194	CA	GLY	A	339	18.808	2.733	40.936	1.00	23.54
ATOM	1195	C	GLY	A	339	19.438	1.559	40.224	1.00	24.96
ATOM	1196	O	GLY	A	339	20.620	1.656	39.859	1.00	28.63
ATOM	1197	N	PHE	A	340	18.728	0.448	40.041	1.00	18.14
ATOM	1198	CA	PHE	A	340	19.302	-0.716	39.384	1.00	9.53
ATOM	1199	CB	PHE	A	340	19.309	-1.942	40.297	1.00	2.00
ATOM	1200	CG	PHE	A	340	20.128	-1.845	41.547	1.00	2.00
ATOM	1201	CD1	PHE	A	340	19.570	-1.401	42.732	1.00	8.65
ATOM	1202	CD2	PHE	A	340	21.467	-2.212	41.540	1.00	2.00
ATOM	1203	CE1	PHE	A	340	20.331	-1.317	43.885	1.00	8.40
ATOM	1204	CE2	PHE	A	340	22.230	-2.133	42.692	1.00	2.00
ATOM	1205	CZ	PHE	A	340	21.660	-1.684	43.868	1.00	3.94
ATOM	1206	C	PHE	A	340	18.541	-1.107	38.118	1.00	2.00
ATOM	1207	O	PHE	A	340	17.333	-0.923	38.025	1.00	17.69
ATOM	1208	N	CYS	A	341	19.272	-1.676	37.174	1.00	4.99
ATOM	1209	CA	CYS	A	341	18.717	-2.173	35.931	1.00	5.91
ATOM	1210	CB	CYS	A	341	19.162	-1.367	34.714	1.00	3.28
ATOM	1211	SG	CYS	A	341	20.612	-2.063	33.862	1.00	21.66
ATOM	1212	C	CYS	A	341	19.234	-3.606	35.762	1.00	9.91
ATOM	1213	O	CYS	A	341	20.195	-3.966	36.442	1.00	21.02
ATOM	1214	N	ILE	A	342	18.638	-4.362	34.858	1.00	2.00
ATOM	1215	CA	ILE	A	342	19.092	-5.722	34.595	1.00	5.13
ATOM	1216	CB	ILE	A	342	17.962	-6.760	34.652	1.00	2.00
ATOM	1217	CG2	ILE	A	342	18.520	-8.176	34.714	1.00	2.00
ATOM	1218	CG1	ILE	A	342	16.998	-6.522	35.812	1.00	5.59
ATOM	1219	CD1	ILE	A	342	17.564	-6.604	37.206	1.00	4.70
ATOM	1220	C	ILE	A	342	19.679	-5.740	33.184	1.00	6.59
ATOM	1221	O	ILE	A	342	18.925	-5.486	32.238	1.00	15.20
ATOM	1222	N	MET	A	343	20.964	-6.029	33.047	1.00	4.13
ATOM	1223	CA	MET	A	343	21.548	-6.089	31.697	1.00	2.00
ATOM	1224	CB	MET	A	343	22.452	-4.900	31.477	1.00	2.00
ATOM	1225	CG	MET	A	343	23.741	-5.035	30.712	1.00	2.41
ATOM	1226	SD	MET	A	343	24.476	-3.439	30.279	1.00	12.19
ATOM	1227	CE	MET	A	343	23.758	-3.200	28.649	1.00	2.00
ATOM	1228	C	MET	A	343	22.190	-7.451	31.479	1.00	2.00
ATOM	1229	O	MET	A	343	23.131	-7.841	32.161	1.00	4.10
ATOM	1230	N	ASP	A	344	21.623	-8.218	30.555	1.00	10.76
ATOM	1231	CA	ASP	A	344	22.107	-9.543	30.213	1.00	4.33
ATOM	1232	CB	ASP	A	344	23.320	-9.411	29.282	1.00	8.28
ATOM	1233	CG	ASP	A	344	22.906	-9.086	27.858	1.00	14.34
ATOM	1234	OD1	ASP	A	344	21.837	-9.578	27.443	1.00	10.84
ATOM	1235	OD2	ASP	A	344	23.641	-8.360	27.159	1.00	19.72
ATOM	1236	C	ASP	A	344	22.481	-10.405	31.399	1.00	2.00
ATOM	1237	O	ASP	A	344	23.628	-10.465	31.847	1.00	20.88
ATOM	1238	N	ASN	A	345	21.522	-11.120	31.960	1.00	2.00
ATOM	1239	CA	ASN	A	345	21.663	-12.063	33.044	1.00	4.77
ATOM	1240	CB	ASN	A	345	22.740	-13.114	32.730	1.00	5.32
ATOM	1241	CG	ASN	A	345	22.523	-13.935	31.477	1.00	14.29
ATOM	1242	OD1	ASN	A	345	23.308	-13.824	30.527	1.00	10.25
ATOM	1243	ND2	ASN	A	345	21.487	-14.764	31.406	1.00	16.15
ATOM	1244	C	ASN	A	345	21.908	-11.464	34.417	1.00	12.38
ATOM	1245	O	ASN	A	345	21.604	-12.146	35.414	1.00	23.19

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ATOM	1246	N	HIS	A	346	22.442	-10.259	34.573	1.00	14.98
ATOM	1247	CA	HIS	A	346	22.719	-9.690	35.885	1.00	16.68
ATOM	1248	CB	HIS	A	346	24.232	-9.563	36.122	1.00	13.78
ATOM	1249	CG	HIS	A	346	25.021	-10.831	36.087	1.00	20.36
ATOM	1250	CD2	HIS	A	346	25.595	-11.507	35.059	1.00	19.57
ATOM	1251	ND1	HIS	A	346	25.300	-11.559	37.224	1.00	20.36
ATOM	1252	CE1	HIS	A	346	26.001	-12.628	36.900	1.00	18.65
ATOM	1253	NE2	HIS	A	346	26.205	-12.617	35.593	1.00	19.08
ATOM	1254	C	HIS	A	346	22.109	-8.309	36.128	1.00	10.84
ATOM	1255	O	HIS	A	346	21.775	-7.537	35.233	1.00	2.00
ATOM	1256	N	LYS	A	347	21.979	-7.986	37.411	1.00	6.15
ATOM	1257	CA	LYS	A	347	21.461	-6.689	37.844	1.00	2.05
ATOM	1258	CB	LYS	A	347	20.710	-6.846	39.166	1.00	2.00
ATOM	1259	CG	LYS	A	347	20.586	-5.618	40.040	1.00	2.00
ATOM	1260	CD	LYS	A	347	19.689	-5.819	41.250	1.00	2.46
ATOM	1261	CE	LYS	A	347	18.268	-5.374	40.951	1.00	2.00
ATOM	1262	NZ	LYS	A	347	17.418	-5.341	42.169	1.00	4.99
ATOM	1263	C	LYS	A	347	22.642	-5.745	37.982	1.00	2.03
ATOM	1264	O	LYS	A	347	23.631	-6.163	38.602	1.00	12.49
ATOM	1265	N	GLU	A	348	22.581	-4.534	37.446	1.00	4.74
ATOM	1266	CA	GLU	A	348	23.720	-3.625	37.588	1.00	4.91
ATOM	1267	CB	GLU	A	348	24.605	-3.662	36.343	1.00	7.84
ATOM	1268	CG	GLU	A	348	25.782	-4.614	36.459	1.00	9.78
ATOM	1269	CD	GLU	A	348	26.374	-4.962	35.108	1.00	14.98
ATOM	1270	OE1	GLU	A	348	26.151	-4.214	34.136	1.00	15.28
ATOM	1271	OE2	GLU	A	348	27.064	-5.999	35.041	1.00	19.34
ATOM	1272	C	GLU	A	348	23.315	-2.189	37.880	1.00	7.21
ATOM	1273	O	GLU	A	348	22.499	-1.602	37.170	1.00	12.54
ATOM	1274	N	ARG	A	349	23.933	-1.611	38.901	1.00	5.74
ATOM	1275	CA	ARG	A	349	23.629	-0.261	39.344	1.00	6.49
ATOM	1276	CB	ARG	A	349	24.545	0.152	40.509	1.00	5.69
ATOM	1277	CG	ARG	A	349	24.040	1.386	41.244	1.00	16.03
ATOM	1278	CD	ARG	A	349	24.745	1.548	42.584	1.00	26.87
ATOM	1279	NE	ARG	A	349	24.564	0.380	43.438	1.00	33.22
ATOM	1280	CZ	ARG	A	349	25.443	-0.072	44.327	1.00	34.51
ATOM	1281	NH1	ARG	A	349	26.611	0.536	44.500	1.00	26.34
ATOM	1282	NH2	ARG	A	349	25.173	-1.152	45.055	1.00	36.01
ATOM	1283	C	ARG	A	349	23.703	0.795	38.252	1.00	2.00
ATOM	1284	O	ARG	A	349	24.577	0.808	37.395	1.00	2.00
ATOM	1285	N	ILE	A	350	22.742	1.710	38.299	1.00	2.00
ATOM	1286	CA	ILE	A	350	22.629	2.851	37.399	1.00	2.00
ATOM	1287	CB	ILE	A	350	21.152	3.103	37.034	1.00	2.00
ATOM	1288	CG2	ILE	A	350	20.989	4.311	36.126	1.00	2.00
ATOM	1289	CG1	ILE	A	350	20.581	1.849	36.366	1.00	5.64
ATOM	1290	CD1	ILE	A	350	19.103	1.922	36.057	1.00	15.11
ATOM	1291	C	ILE	A	350	23.218	4.080	38.086	1.00	6.11
ATOM	1292	O	ILE	A	350	22.789	4.435	39.186	1.00	5.93
ATOM	1293	N	ALA	A	351	24.190	4.737	37.484	1.00	6.08
ATOM	1294	CA	ALA	A	351	24.861	5.890	38.061	1.00	8.66
ATOM	1295	CB	ALA	A	351	25.986	6.329	37.123	1.00	11.31
ATOM	1296	C	ALA	A	351	23.986	7.084	38.411	1.00	13.17
ATOM	1297	O	ALA	A	351	23.786	7.370	39.602	1.00	20.51
ATOM	1298	N	ASN	A	352	23.507	7.839	37.425	1.00	9.88
ATOM	1299	CA	ASN	A	352	22.674	9.006	37.708	1.00	12.64
ATOM	1300	CB	ASN	A	352	23.212	10.239	36.983	1.00	17.89
ATOM	1301	CG	ASN	A	352	24.472	10.835	37.576	1.00	32.63
ATOM	1302	OD1	ASN	A	352	24.471	11.983	38.045	1.00	25.24
ATOM	1303	ND2	ASN	A	352	25.570	10.081	37.551	1.00	35.85
ATOM	1304	C	ASN	A	352	21.216	8.779	37.332	1.00	13.40
ATOM	1305	O	ASN	A	352	20.761	9.301	36.309	1.00	23.69
ATOM	1306	N	PHE	A	353	20.458	8.024	38.128	1.00	10.88
ATOM	1307	CA	PHE	A	353	19.053	7.797	37.773	1.00	10.72
ATOM	1308	CB	PHE	A	353	18.421	6.630	38.518	1.00	2.00

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ATOM	1309	CG	PHE A 353	18.552	6.710	40.010	1.00	4.52
ATOM	1310	CD1	PHE A 353	17.447	6.973	40.799	1.00	2.69
ATOM	1311	CD2	PHE A 353	19.772	6.513	40.629	1.00	2.00
ATOM	1312	CE1	PHE A 353	17.562	7.044	42.176	1.00	11.70
ATOM	1313	CE2	PHE A 353	19.898	6.584	42.000	1.00	2.00
ATOM	1314	CZ	PHE A 353	18.790	6.853	42.777	1.00	2.00
ATOM	1315	C	PHE A 353	18.240	9.073	37.953	1.00	6.86
ATOM	1316	O	PHE A 353	17.506	9.418	37.026	1.00	2.03
ATOM	1317	N	LYS A 354	18.372	9.748	39.093	1.00	9.54
ATOM	1318	CA	LYS A 354	17.641	10.999	39.297	1.00	6.96
ATOM	1319	CB	LYS A 354	17.924	11.660	40.643	1.00	4.97
ATOM	1320	CG	LYS A 354	17.704	10.789	41.864	1.00	2.00
ATOM	1321	CD	LYS A 354	18.151	11.456	43.159	1.00	2.33
ATOM	1322	CE	LYS A 354	18.466	10.386	44.197	1.00	13.34
ATOM	1323	NZ	LYS A 354	18.856	10.992	45.504	1.00	23.24
ATOM	1324	C	LYS A 354	18.009	11.940	38.148	1.00	5.25
ATOM	1325	O	LYS A 354	19.093	11.857	37.583	1.00	5.10
ATOM	1326	N	ILE A 355	17.078	12.785	37.754	1.00	2.38
ATOM	1327	CA	ILE A 355	17.310	13.743	36.675	1.00	2.00
ATOM	1328	CB	ILE A 355	16.135	13.815	35.690	1.00	2.00
ATOM	1329	CG2	ILE A 355	15.952	15.201	35.095	1.00	7.42
ATOM	1330	CG1	ILE A 355	16.309	12.772	34.580	1.00	2.00
ATOM	1331	CD1	ILE A 355	15.302	12.798	33.462	1.00	2.00
ATOM	1332	C	ILE A 355	17.608	15.075	37.360	1.00	2.00
ATOM	1333	O	ILE A 355	16.873	15.444	38.280	1.00	6.25
ATOM	1334	N	GLU A 356	18.700	15.727	36.976	1.00	2.00
ATOM	1335	CA	GLU A 356	19.042	17.005	37.601	1.00	2.00
ATOM	1336	CB	GLU A 356	20.275	17.630	36.960	1.00	12.83
ATOM	1337	CG	GLU A 356	21.522	17.816	37.799	1.00	15.63
ATOM	1338	CD	GLU A 356	22.197	16.537	38.240	1.00	21.20
ATOM	1339	OE1	GLU A 356	22.294	16.319	39.469	1.00	29.16
ATOM	1340	OE2	GLU A 356	22.628	15.755	37.364	1.00	14.93
ATOM	1341	C	GLU A 356	17.851	17.934	37.421	1.00	4.09
ATOM	1342	O	GLU A 356	17.383	18.085	36.286	1.00	2.49
ATOM	1343	N	PRO A 357	17.371	18.521	38.500	1.00	2.00
ATOM	1344	CD	PRO A 357	17.896	18.374	39.871	1.00	10.73
ATOM	1345	CA	PRO A 357	16.252	19.453	38.429	1.00	11.39
ATOM	1346	CB	PRO A 357	16.025	19.840	39.881	1.00	14.60
ATOM	1347	CG	PRO A 357	17.317	19.577	40.576	1.00	16.08
ATOM	1348	C	PRO A 357	16.604	20.623	37.524	1.00	10.47
ATOM	1349	O	PRO A 357	17.727	20.747	37.030	1.00	8.84
ATOM	1350	N	PRO A 358	15.634	21.479	37.231	1.00	12.68
ATOM	1351	CD	PRO A 358	14.249	21.432	37.764	1.00	18.48
ATOM	1352	CA	PRO A 358	15.838	22.645	36.392	1.00	5.64
ATOM	1353	CB	PRO A 358	14.429	23.101	36.046	1.00	6.93
ATOM	1354	CG	PRO A 358	13.607	22.678	37.210	1.00	16.29
ATOM	1355	C	PRO A 358	16.556	23.722	37.192	1.00	6.62
ATOM	1356	O	PRO A 358	16.342	23.748	38.410	1.00	9.52
ATOM	1357	N	GLY A 359	17.375	24.524	36.523	1.00	2.00
ATOM	1358	CA	GLY A 359	18.064	25.584	37.282	1.00	12.15
ATOM	1359	C	GLY A 359	18.760	26.528	36.304	1.00	18.05
ATOM	1360	O	GLY A 359	18.547	26.376	35.095	1.00	23.39
ATOM	1361	N	LEU A 360	19.571	27.451	36.820	1.00	2.00
ATOM	1362	CA	LEU A 360	20.284	28.329	35.885	1.00	2.00
ATOM	1363	CB	LEU A 360	20.447	29.713	36.512	1.00	2.00
ATOM	1364	CG	LEU A 360	19.138	30.465	36.778	1.00	7.34
ATOM	1365	CD1	LEU A 360	19.334	31.530	37.846	1.00	9.33
ATOM	1366	CD2	LEU A 360	18.616	31.076	35.485	1.00	2.50
ATOM	1367	C	LEU A 360	21.640	27.723	35.544	1.00	8.98
ATOM	1368	O	LEU A 360	22.238	27.019	36.360	1.00	14.81
ATOM	1369	N	PHE A 361	22.122	27.998	34.343	1.00	2.00
ATOM	1370	CA	PHE A 361	23.417	27.515	33.888	1.00	5.37
ATOM	1371	CB	PHE A 361	23.428	27.507	32.356	1.00	3.16

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ATOM	1372	CG	PHE	A	361	24.630	26.858	31.746	1.00	2.41
ATOM	1373	CD1	PHE	A	361	25.720	27.624	31.368	1.00	8.89
ATOM	1374	CD2	PHE	A	361	24.671	25.489	31.540	1.00	2.00
ATOM	1375	CE1	PHE	A	361	26.837	27.036	30.799	1.00	2.00
ATOM	1376	CE2	PHE	A	361	25.778	24.893	30.968	1.00	2.00
ATOM	1377	CZ	PHE	A	361	26.848	25.672	30.599	1.00	2.00
ATOM	1378	C	PHE	A	361	24.522	28.436	34.390	1.00	7.05
ATOM	1379	O	PHE	A	361	24.303	29.648	34.487	1.00	16.57
ATOM	1380	N	ARG	A	362	25.694	27.897	34.692	1.00	12.99
ATOM	1381	CA	ARG	A	362	26.821	28.725	35.125	1.00	13.45
ATOM	1382	CB	ARG	A	362	27.210	28.506	36.581	1.00	14.49
ATOM	1383	CG	ARG	A	362	28.014	29.632	37.213	1.00	21.18
ATOM	1384	CD	ARG	A	362	29.445	29.687	36.725	1.00	27.56
ATOM	1385	NE	ARG	A	362	30.080	30.996	36.836	1.00	32.37
ATOM	1386	CZ	ARG	A	362	31.081	31.394	36.049	1.00	34.18
ATOM	1387	NH1	ARG	A	362	31.540	30.586	35.100	1.00	26.06
ATOM	1388	NH2	ARG	A	362	31.620	32.600	36.200	1.00	34.86
ATOM	1389	C	ARG	A	362	28.015	28.396	34.223	1.00	14.42
ATOM	1390	O	ARG	A	362	28.634	29.272	33.629	1.00	18.60
ATOM	1391	N	GLY	A	363	28.286	27.096	34.140	1.00	13.84
ATOM	1392	CA	GLY	A	363	29.381	26.586	33.321	1.00	2.00
ATOM	1393	C	GLY	A	363	30.705	26.893	34.010	1.00	10.65
ATOM	1394	O	GLY	A	363	30.710	27.391	35.140	1.00	10.74
ATOM	1395	N	ARG	A	364	31.814	26.569	33.346	1.00	10.57
ATOM	1396	CA	ARG	A	364	33.124	26.830	33.957	1.00	2.00
ATOM	1397	CB	ARG	A	364	33.906	25.535	34.164	1.00	2.00
ATOM	1398	CG	ARG	A	364	33.278	24.604	35.192	1.00	11.09
ATOM	1399	CD	ARG	A	364	34.081	23.370	35.517	1.00	19.38
ATOM	1400	NE	ARG	A	364	34.114	22.331	34.508	1.00	29.21
ATOM	1401	CZ	ARG	A	364	33.518	21.143	34.532	1.00	34.51
ATOM	1402	NH1	ARG	A	364	32.790	20.784	35.582	1.00	35.69
ATOM	1403	NH2	ARG	A	364	33.679	20.318	33.498	1.00	26.28
ATOM	1404	C	ARG	A	364	33.869	27.867	33.126	1.00	2.00
ATOM	1405	O	ARG	A	364	33.944	27.769	31.899	1.00	2.00
ATOM	1406	N	GLY	A	365	34.362	28.899	33.814	1.00	5.64
ATOM	1407	CA	GLY	A	365	35.074	29.983	33.147	1.00	8.25
ATOM	1408	C	GLY	A	365	34.124	31.091	32.702	1.00	13.08
ATOM	1409	O	GLY	A	365	33.095	31.343	33.334	1.00	2.00
ATOM	1410	N	ASN	A	366	34.456	31.762	31.601	1.00	15.55
ATOM	1411	CA	ASN	A	366	33.649	32.857	31.083	1.00	16.26
ATOM	1412	CB	ASN	A	366	34.535	34.008	30.590	1.00	16.27
ATOM	1413	CG	ASN	A	366	34.849	35.008	31.683	1.00	13.24
ATOM	1414	OD1	ASN	A	366	35.818	35.759	31.548	1.00	22.43
ATOM	1415	ND2	ASN	A	366	34.055	35.028	32.746	1.00	6.30
ATOM	1416	C	ASN	A	366	32.715	32.421	29.962	1.00	10.48
ATOM	1417	O	ASN	A	366	32.786	32.903	28.833	1.00	15.34
ATOM	1418	N	HIS	A	367	31.811	31.515	30.302	1.00	6.77
ATOM	1419	CA	HIS	A	367	30.866	30.989	29.325	1.00	2.00
ATOM	1420	CB	HIS	A	367	30.043	29.877	29.981	1.00	2.00
ATOM	1421	CG	HIS	A	367	29.586	28.779	29.079	1.00	9.30
ATOM	1422	CD2	HIS	A	367	28.743	28.787	28.016	1.00	15.99
ATOM	1423	ND1	HIS	A	367	29.990	27.468	29.233	1.00	10.73
ATOM	1424	CE1	HIS	A	367	29.425	26.723	28.295	1.00	14.06
ATOM	1425	NE2	HIS	A	367	28.666	27.500	27.537	1.00	17.19
ATOM	1426	C	HIS	A	367	29.947	32.080	28.807	1.00	2.00
ATOM	1427	O	HIS	A	367	29.374	32.852	29.578	1.00	14.13
ATOM	1428	N	PRO	A	368	29.721	32.095	27.497	1.00	2.00
ATOM	1429	CD	PRO	A	368	30.372	31.197	26.519	1.00	2.00
ATOM	1430	CA	PRO	A	368	28.805	33.024	26.861	1.00	2.00
ATOM	1431	CB	PRO	A	368	29.132	32.925	25.382	1.00	3.82
ATOM	1432	CG	PRO	A	368	29.909	31.680	25.187	1.00	2.00
ATOM	1433	C	PRO	A	368	27.346	32.695	27.157	1.00	9.78
ATOM	1434	O	PRO	A	368	26.458	33.524	26.932	1.00	16.28



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ATOM	1435	N	LYS	A	369	27.052	31.502	27.670	1.00	2.00
ATOM	1436	CA	LYS	A	369	25.714	31.060	28.003	1.00	2.00
ATOM	1437	CB	LYS	A	369	25.445	29.695	27.338	1.00	2.00
ATOM	1438	CG	LYS	A	369	25.406	29.764	25.825	1.00	4.09
ATOM	1439	CD	LYS	A	369	25.158	28.415	25.160	1.00	2.00
ATOM	1440	CE	LYS	A	369	25.113	28.593	23.649	1.00	2.00
ATOM	1441	NZ	LYS	A	369	24.106	29.617	23.255	1.00	2.00
ATOM	1442	C	LYS	A	369	25.417	30.980	29.495	1.00	7.66
ATOM	1443	O	LYS	A	369	24.413	30.367	29.889	1.00	11.64
ATOM	1444	N	MET	A	370	26.227	31.590	30.355	1.00	7.24
ATOM	1445	CA	MET	A	370	25.886	31.551	31.782	1.00	5.87
ATOM	1446	CB	MET	A	370	26.959	32.113	32.692	1.00	13.32
ATOM	1447	CG	MET	A	370	27.181	33.612	32.525	1.00	14.66
ATOM	1448	SD	MET	A	370	28.771	34.124	33.186	1.00	27.37
ATOM	1449	CE	MET	A	370	29.848	32.840	32.552	1.00	13.93
ATOM	1450	C	MET	A	370	24.608	32.382	31.928	1.00	9.49
ATOM	1451	O	MET	A	370	24.314	33.177	31.026	1.00	4.96
ATOM	1452	N	GLY	A	371	23.864	32.169	33.008	1.00	8.39
ATOM	1453	CA	GLY	A	371	22.621	32.905	33.197	1.00	3.52
ATOM	1454	C	GLY	A	371	21.395	32.236	32.600	1.00	8.27
ATOM	1455	O	GLY	A	371	20.301	32.380	33.157	1.00	18.40
ATOM	1456	N	MET	A	372	21.518	31.509	31.498	1.00	2.00
ATOM	1457	CA	MET	A	372	20.406	30.834	30.858	1.00	3.24
ATOM	1458	CB	MET	A	372	20.854	30.144	29.563	1.00	2.00
ATOM	1459	CG	MET	A	372	21.407	31.119	28.536	1.00	5.77
ATOM	1460	SD	MET	A	372	21.398	30.453	26.868	1.00	20.85
ATOM	1461	CE	MET	A	372	19.638	30.232	26.595	1.00	16.93
ATOM	1462	C	MET	A	372	19.705	29.842	31.778	1.00	2.00
ATOM	1463	O	MET	A	372	20.259	29.389	32.774	1.00	4.27
ATOM	1464	N	LEU	A	373	18.465	29.511	31.432	1.00	8.13
ATOM	1465	CA	LEU	A	373	17.626	28.601	32.190	1.00	7.87
ATOM	1466	CB	LEU	A	373	16.162	29.072	32.085	1.00	2.00
ATOM	1467	CG	LEU	A	373	15.130	28.317	32.913	1.00	2.00
ATOM	1468	CD1	LEU	A	373	15.095	28.863	34.336	1.00	7.10
ATOM	1469	CD2	LEU	A	373	13.737	28.409	32.299	1.00	2.00
ATOM	1470	C	LEU	A	373	17.666	27.153	31.708	1.00	2.00
ATOM	1471	O	LEU	A	373	17.369	26.894	30.532	1.00	13.07
ATOM	1472	N	LYS	A	374	17.978	26.222	32.609	1.00	5.96
ATOM	1473	CA	LYS	A	374	17.944	24.803	32.258	1.00	9.16
ATOM	1474	CB	LYS	A	374	18.882	23.884	33.007	1.00	2.00
ATOM	1475	CG	LYS	A	374	20.373	23.966	32.827	1.00	2.00
ATOM	1476	CD	LYS	A	374	21.140	23.212	33.912	1.00	2.00
ATOM	1477	CE	LYS	A	374	21.199	23.994	35.209	1.00	2.00
ATOM	1478	NZ	LYS	A	374	22.356	23.669	36.084	1.00	5.70
ATOM	1479	C	LYS	A	374	16.498	24.377	32.583	1.00	10.14
ATOM	1480	O	LYS	A	374	16.169	24.219	33.754	1.00	19.32
ATOM	1481	N	ARG	A	375	15.661	24.261	31.571	1.00	8.06
ATOM	1482	CA	ARG	A	375	14.273	23.874	31.776	1.00	5.61
ATOM	1483	CB	ARG	A	375	13.549	23.820	30.423	1.00	2.00
ATOM	1484	CG	ARG	A	375	13.986	22.660	29.546	1.00	8.40
ATOM	1485	CD	ARG	A	375	13.183	22.564	28.262	1.00	17.36
ATOM	1486	NE	ARG	A	375	13.021	21.201	27.774	1.00	23.35
ATOM	1487	CZ	ARG	A	375	13.977	20.340	27.454	1.00	28.04
ATOM	1488	NH1	ARG	A	375	15.265	20.652	27.551	1.00	32.18
ATOM	1489	NH2	ARG	A	375	13.653	19.127	27.020	1.00	22.00
ATOM	1490	C	ARG	A	375	14.158	22.525	32.472	1.00	5.00
ATOM	1491	O	ARG	A	375	15.078	21.718	32.507	1.00	2.00
ATOM	1492	N	ARG	A	376	12.993	22.282	33.049	1.00	2.05
ATOM	1493	CA	ARG	A	376	12.652	21.064	33.758	1.00	7.34
ATOM	1494	CB	ARG	A	376	11.408	21.313	34.622	1.00	4.50
ATOM	1495	CG	ARG	A	376	10.874	20.071	35.315	1.00	2.00
ATOM	1496	CD	ARG	A	376	9.660	20.424	36.159	1.00	3.44
ATOM	1497	NE	ARG	A	376	10.011	21.338	37.238	1.00	8.68

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ATOM	1498	CZ	ARG	A	376	10.421	20.964	38.444	1.00	9.91
ATOM	1499	NH1	ARG	A	376	10.539	19.682	38.767	1.00	11.47
ATOM	1500	NH2	ARG	A	376	10.695	21.904	39.334	1.00	2.00
ATOM	1501	C	ARG	A	376	12.354	19.941	32.773	1.00	4.91
ATOM	1502	O	ARG	A	376	11.341	20.013	32.075	1.00	6.34
ATOM	1503	N	ILE	A	377	13.211	18.934	32.729	1.00	4.68
ATOM	1504	CA	ILE	A	377	13.015	17.796	31.831	1.00	2.00
ATOM	1505	CB	ILE	A	377	14.218	16.839	31.929	1.00	2.00
ATOM	1506	CG2	ILE	A	377	14.158	15.809	30.811	1.00	2.00
ATOM	1507	CG1	ILE	A	377	15.538	17.610	31.932	1.00	2.77
ATOM	1508	CD1	ILE	A	377	15.919	18.265	30.626	1.00	15.82
ATOM	1509	C	ILE	A	377	11.731	17.046	32.167	1.00	6.31
ATOM	1510	O	ILE	A	377	11.443	16.742	33.328	1.00	15.50
ATOM	1511	N	MET	A	378	10.926	16.754	31.162	1.00	2.52
ATOM	1512	CA	MET	A	378	9.654	16.053	31.314	1.00	13.13
ATOM	1513	CB	MET	A	378	8.448	16.782	30.754	1.00	10.24
ATOM	1514	CG	MET	A	378	7.893	18.092	31.179	1.00	10.70
ATOM	1515	SD	MET	A	378	7.518	18.412	32.902	1.00	15.15
ATOM	1516	CE	MET	A	378	6.949	16.828	33.504	1.00	2.00
ATOM	1517	C	MET	A	378	9.734	14.708	30.579	1.00	19.31
ATOM	1518	O	MET	A	378	10.630	14.484	29.761	1.00	28.50
ATOM	1519	N	PRO	A	379	8.742	13.843	30.792	1.00	11.20
ATOM	1520	CD	PRO	A	379	7.625	14.044	31.742	1.00	11.83
ATOM	1521	CA	PRO	A	379	8.664	12.538	30.169	1.00	9.42
ATOM	1522	CB	PRO	A	379	7.470	11.840	30.800	1.00	5.63
ATOM	1523	CG	PRO	A	379	7.070	12.665	31.962	1.00	10.64
ATOM	1524	C	PRO	A	379	8.495	12.602	28.662	1.00	16.09
ATOM	1525	O	PRO	A	379	8.811	11.659	27.932	1.00	20.95
ATOM	1526	N	GLU	A	380	8.014	13.728	28.147	1.00	10.88
ATOM	1527	CA	GLU	A	380	7.841	13.969	26.731	1.00	9.58
ATOM	1528	CB	GLU	A	380	6.959	15.193	26.487	1.00	10.55
ATOM	1529	CG	GLU	A	380	5.472	14.956	26.491	1.00	15.53
ATOM	1530	CD	GLU	A	380	4.828	14.661	27.821	1.00	12.95
ATOM	1531	OE1	GLU	A	380	5.325	15.068	28.887	1.00	27.73
ATOM	1532	OE2	GLU	A	380	3.768	14.000	27.778	1.00	21.19
ATOM	1533	C	GLU	A	380	9.182	14.201	26.040	1.00	15.72
ATOM	1534	O	GLU	A	380	9.252	14.116	24.813	1.00	16.80
ATOM	1535	N	ASP	A	381	10.221	14.543	26.796	1.00	16.39
ATOM	1536	CA	ASP	A	381	11.548	14.774	26.253	1.00	12.90
ATOM	1537	CB	ASP	A	381	12.305	15.831	27.078	1.00	2.00
ATOM	1538	CG	ASP	A	381	11.428	17.034	27.367	1.00	2.00
ATOM	1539	OD1	ASP	A	381	11.205	17.786	26.394	1.00	8.46
ATOM	1540	OD2	ASP	A	381	10.993	17.194	28.524	1.00	5.72
ATOM	1541	C	ASP	A	381	12.365	13.482	26.282	1.00	16.14
ATOM	1542	O	ASP	A	381	13.296	13.289	25.505	1.00	21.29
ATOM	1543	N	ILE	A	382	12.016	12.602	27.205	1.00	8.54
ATOM	1544	CA	ILE	A	382	12.700	11.348	27.467	1.00	4.12
ATOM	1545	CB	ILE	A	382	12.156	10.846	28.828	1.00	5.27
ATOM	1546	CG2	ILE	A	382	12.645	9.459	29.172	1.00	2.00
ATOM	1547	CG1	ILE	A	382	12.550	11.845	29.920	1.00	8.01
ATOM	1548	CD1	ILE	A	382	14.025	11.891	30.259	1.00	2.00
ATOM	1549	C	ILE	A	382	12.599	10.268	26.410	1.00	3.42
ATOM	1550	O	ILE	A	382	11.542	9.996	25.848	1.00	2.00
ATOM	1551	N	ILE	A	383	13.723	9.612	26.094	1.00	8.21
ATOM	1552	CA	ILE	A	383	13.760	8.539	25.108	1.00	10.31
ATOM	1553	CB	ILE	A	383	14.619	8.824	23.859	1.00	3.52
ATOM	1554	CG2	ILE	A	383	14.417	7.679	22.864	1.00	3.84
ATOM	1555	CG1	ILE	A	383	14.289	10.155	23.191	1.00	2.00
ATOM	1556	CD1	ILE	A	383	15.131	10.512	21.985	1.00	2.00
ATOM	1557	C	ILE	A	383	14.267	7.236	25.732	1.00	5.35
ATOM	1558	O	ILE	A	383	15.466	6.971	25.775	1.00	13.66
ATOM	1559	N	ILE	A	384	13.361	6.390	26.187	1.00	6.92
ATOM	1560	CA	ILE	A	384	13.700	5.124	26.825	1.00	2.00

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ATOM	1561	CB	ILE	A	384	12.442	4.513	27.479	1.00	2.31
ATOM	1562	CG2	ILE	A	384	12.750	3.265	28.287	1.00	2.00
ATOM	1563	CG1	ILE	A	384	11.734	5.547	28.357	1.00	2.00
ATOM	1564	CD1	ILE	A	384	12.496	6.064	29.540	1.00	2.00
ATOM	1565	C	ILE	A	384	14.321	4.113	25.871	1.00	5.51
ATOM	1566	O	ILE	A	384	13.876	3.949	24.738	1.00	10.52
ATOM	1567	N	ASN	A	385	15.355	3.426	26.344	1.00	2.00
ATOM	1568	CA	ASN	A	385	16.067	2.402	25.601	1.00	2.00
ATOM	1569	CB	ASN	A	385	17.541	2.747	25.374	1.00	4.36
ATOM	1570	CG	ASN	A	385	18.168	1.861	24.313	1.00	8.31
ATOM	1571	OD1	ASN	A	385	17.588	1.623	23.252	1.00	10.01
ATOM	1572	ND2	ASN	A	385	19.363	1.345	24.573	1.00	11.58
ATOM	1573	C	ASN	A	385	15.975	1.085	26.372	1.00	8.43
ATOM	1574	O	ASN	A	385	16.080	1.091	27.605	1.00	11.64
ATOM	1575	N	CYS	A	386	15.810	-0.024	25.665	1.00	2.00
ATOM	1576	CA	CYS	A	386	15.652	-1.321	26.311	1.00	6.45
ATOM	1577	CB	CYS	A	386	14.533	-1.302	27.364	1.00	12.11
ATOM	1578	SG	CYS	A	386	12.874	-1.461	26.664	1.00	7.89
ATOM	1579	C	CYS	A	386	15.301	-2.405	25.291	1.00	12.11
ATOM	1580	O	CYS	A	386	14.925	-2.136	24.150	1.00	13.51
ATOM	1581	N	SER	A	387	15.409	-3.650	25.737	1.00	5.36
ATOM	1582	CA	SER	A	387	15.163	-4.810	24.900	1.00	16.84
ATOM	1583	CB	SER	A	387	15.852	-6.010	25.573	1.00	22.17
ATOM	1584	OG	SER	A	387	15.670	-5.888	26.975	1.00	25.35
ATOM	1585	C	SER	A	387	13.700	-5.130	24.672	1.00	21.31
ATOM	1586	O	SER	A	387	12.881	-5.124	25.595	1.00	15.42
ATOM	1587	N	LYS	A	388	13.381	-5.566	23.453	1.00	19.69
ATOM	1588	CA	LYS	A	388	12.057	-5.924	22.992	1.00	15.73
ATOM	1589	CB	LYS	A	388	12.114	-6.481	21.557	1.00	20.76
ATOM	1590	CG	LYS	A	388	12.389	-5.467	20.465	1.00	21.75
ATOM	1591	CD	LYS	A	388	12.056	-6.013	19.087	1.00	23.97
ATOM	1592	CE	LYS	A	388	12.098	-4.940	18.016	1.00	29.16
ATOM	1593	NZ	LYS	A	388	13.478	-4.655	17.536	1.00	31.23
ATOM	1594	C	LYS	A	388	11.291	-6.934	23.833	1.00	16.00
ATOM	1595	O	LYS	A	388	10.076	-7.078	23.655	1.00	22.86
ATOM	1596	N	ASP	A	389	11.941	-7.678	24.706	1.00	16.48
ATOM	1597	CA	ASP	A	389	11.344	-8.644	25.599	1.00	13.87
ATOM	1598	CB	ASP	A	389	11.966	-10.026	25.398	1.00	17.20
ATOM	1599	CG	ASP	A	389	13.465	-10.072	25.616	1.00	28.37
ATOM	1600	OD1	ASP	A	389	14.052	-11.144	25.329	1.00	33.68
ATOM	1601	OD2	ASP	A	389	14.090	-9.082	26.057	1.00	22.30
ATOM	1602	C	ASP	A	389	11.498	-8.218	27.061	1.00	14.97
ATOM	1603	O	ASP	A	389	11.605	-9.073	27.946	1.00	15.03
ATOM	1604	N	ALA	A	390	11.549	-6.912	27.316	1.00	9.78
ATOM	1605	CA	ALA	A	390	11.641	-6.434	28.697	1.00	10.76
ATOM	1606	CB	ALA	A	390	12.866	-5.594	28.963	1.00	13.44
ATOM	1607	C	ALA	A	390	10.371	-5.636	28.990	1.00	11.84
ATOM	1608	O	ALA	A	390	9.695	-5.217	28.051	1.00	21.91
ATOM	1609	N	LYS	A	391	10.043	-5.452	30.256	1.00	9.63
ATOM	1610	CA	LYS	A	391	8.836	-4.729	30.630	1.00	5.92
ATOM	1611	CB	LYS	A	391	8.400	-5.166	32.035	1.00	10.01
ATOM	1612	CG	LYS	A	391	6.911	-4.982	32.250	1.00	17.59
ATOM	1613	CD	LYS	A	391	6.450	-5.367	33.646	1.00	12.68
ATOM	1614	CE	LYS	A	391	5.165	-4.594	33.937	1.00	15.80
ATOM	1615	NZ	LYS	A	391	5.385	-3.126	33.761	1.00	13.69
ATOM	1616	C	LYS	A	391	9.050	-3.226	30.577	1.00	9.03
ATOM	1617	O	LYS	A	391	9.610	-2.620	31.495	1.00	23.41
ATOM	1618	N	VAL	A	392	8.613	-2.609	29.488	1.00	6.05
ATOM	1619	CA	VAL	A	392	8.760	-1.165	29.313	1.00	2.79
ATOM	1620	CB	VAL	A	392	7.915	-0.703	28.112	1.00	2.16
ATOM	1621	CG1	VAL	A	392	7.920	0.802	27.923	1.00	11.22
ATOM	1622	CG2	VAL	A	392	8.442	-1.386	26.865	1.00	2.00
ATOM	1623	C	VAL	A	392	8.335	-0.403	30.557	1.00	2.00

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ATOM	1624	O	VAL	A	392	7.297	-0.705	31.141	1.00	14.43
ATOM	1625	N	PRO	A	393	9.102	0.611	30.922	1.00	2.00
ATOM	1626	CD	PRO	A	393	10.365	1.037	30.282	1.00	2.00
ATOM	1627	CA	PRO	A	393	8.809	1.419	32.098	1.00	7.02
ATOM	1628	CB	PRO	A	393	10.116	2.155	32.375	1.00	6.55
ATOM	1629	CG	PRO	A	393	10.738	2.292	31.029	1.00	2.00
ATOM	1630	C	PRO	A	393	7.646	2.367	31.847	1.00	15.16
ATOM	1631	O	PRO	A	393	7.581	3.041	30.817	1.00	2.29
ATOM	1632	N	SER	A	394	6.707	2.419	32.794	1.00	17.27
ATOM	1633	CA	SER	A	394	5.526	3.264	32.669	1.00	17.95
ATOM	1634	CB	SER	A	394	4.440	2.777	33.640	1.00	19.33
ATOM	1635	OG	SER	A	394	4.283	1.372	33.601	1.00	24.53
ATOM	1636	C	SER	A	394	5.812	4.719	33.006	1.00	13.16
ATOM	1637	O	SER	A	394	6.312	4.998	34.098	1.00	19.16
ATOM	1638	N	PRO	A	395	5.460	5.631	32.111	1.00	8.58
ATOM	1639	CD	PRO	A	395	4.835	5.369	30.798	1.00	2.00
ATOM	1640	CA	PRO	A	395	5.656	7.050	32.378	1.00	7.76
ATOM	1641	CB	PRO	A	395	5.166	7.746	31.121	1.00	2.00
ATOM	1642	CG	PRO	A	395	4.432	6.735	30.322	1.00	2.00
ATOM	1643	C	PRO	A	395	4.798	7.422	33.573	1.00	5.28
ATOM	1644	O	PRO	A	395	3.967	6.617	33.997	1.00	13.50
ATOM	1645	N	PRO	A	396	4.974	8.617	34.108	1.00	10.69
ATOM	1646	CD	PRO	A	396	5.929	9.646	33.644	1.00	3.83
ATOM	1647	CA	PRO	A	396	4.117	9.085	35.198	1.00	9.00
ATOM	1648	CB	PRO	A	396	4.794	10.342	35.686	1.00	10.55
ATOM	1649	CG	PRO	A	396	5.718	10.779	34.607	1.00	11.18
ATOM	1650	C	PRO	A	396	2.718	9.304	34.632	1.00	2.00
ATOM	1651	O	PRO	A	396	2.545	9.447	33.415	1.00	9.73
ATOM	1652	N	PRO	A	397	1.705	9.298	35.485	1.00	2.00
ATOM	1653	CD	PRO	A	397	1.858	9.104	36.948	1.00	2.00
ATOM	1654	CA	PRO	A	397	0.318	9.424	35.089	1.00	2.00
ATOM	1655	CB	PRO	A	397	-0.460	9.530	36.395	1.00	2.00
ATOM	1656	CG	PRO	A	397	0.477	9.260	37.503	1.00	2.00
ATOM	1657	C	PRO	A	397	-0.010	10.613	34.206	1.00	3.92
ATOM	1658	O	PRO	A	397	0.323	11.747	34.557	1.00	3.45
ATOM	1659	N	GLY	A	398	-0.644	10.361	33.058	1.00	2.00
ATOM	1660	CA	GLY	A	398	-1.030	11.431	32.153	1.00	5.98
ATOM	1661	C	GLY	A	398	0.088	11.959	31.273	1.00	12.31
ATOM	1662	O	GLY	A	398	-0.027	13.025	30.652	1.00	15.20
ATOM	1663	N	HIS	A	399	1.199	11.232	31.220	1.00	9.26
ATOM	1664	CA	HIS	A	399	2.352	11.601	30.425	1.00	8.16
ATOM	1665	CB	HIS	A	399	3.554	12.016	31.255	1.00	11.46
ATOM	1666	CG	HIS	A	399	3.445	13.263	32.061	1.00	17.53
ATOM	1667	CD2	HIS	A	399	3.846	14.534	31.814	1.00	16.37
ATOM	1668	ND1	HIS	A	399	2.864	13.274	33.315	1.00	20.61
ATOM	1669	CE1	HIS	A	399	2.905	14.500	33.808	1.00	19.25
ATOM	1670	NE2	HIS	A	399	3.496	15.281	32.918	1.00	23.21
ATOM	1671	C	HIS	A	399	2.796	10.413	29.566	1.00	11.00
ATOM	1672	O	HIS	A	399	2.544	9.259	29.892	1.00	14.73
ATOM	1673	N	LYS	A	400	3.499	10.746	28.497	1.00	14.57
ATOM	1674	CA	LYS	A	400	4.002	9.748	27.561	1.00	16.89
ATOM	1675	CB	LYS	A	400	3.095	9.722	26.331	1.00	18.34
ATOM	1676	CG	LYS	A	400	3.607	8.920	25.151	1.00	22.46
ATOM	1677	CD	LYS	A	400	2.565	8.822	24.043	1.00	23.47
ATOM	1678	CE	LYS	A	400	1.441	7.875	24.438	1.00	22.62
ATOM	1679	NZ	LYS	A	400	0.287	7.962	23.497	1.00	27.52
ATOM	1680	C	LYS	A	400	5.448	10.057	27.196	1.00	13.92
ATOM	1681	O	LYS	A	400	5.827	11.219	27.026	1.00	14.78
ATOM	1682	N	TRP	A	401	6.260	9.007	27.095	1.00	10.55
ATOM	1683	CA	TRP	A	401	7.658	9.210	26.725	1.00	10.83
ATOM	1684	CB	TRP	A	401	8.448	7.911	26.677	1.00	10.56
ATOM	1685	CG	TRP	A	401	8.445	7.042	27.892	1.00	7.82
ATOM	1686	CD2	TRP	A	401	8.913	7.384	29.201	1.00	2.05

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ATOM	1687	CE2	TRP	A	401	8.719	6.255	30.022	1.00	2.00
ATOM	1688	CE3	TRP	A	401	9.456	8.542	29.762	1.00	2.74
ATOM	1689	CD1	TRP	A	401	8.003	5.748	27.967	1.00	2.00
ATOM	1690	NE1	TRP	A	401	8.164	5.270	29.244	1.00	2.71
ATOM	1691	CZ2	TRP	A	401	9.061	6.248	31.373	1.00	2.10
ATOM	1692	CZ3	TRP	A	401	9.802	8.534	31.102	1.00	2.00
ATOM	1693	CH2	TRP	A	401	9.603	7.395	31.893	1.00	2.00
ATOM	1694	C	TRP	A	401	7.697	9.855	25.335	1.00	11.93
ATOM	1695	O	TRP	A	401	6.698	9.876	24.615	1.00	8.74
ATOM	1696	N	LYS	A	402	8.874	10.335	24.957	1.00	11.60
ATOM	1697	CA	LYS	A	402	9.101	10.916	23.642	1.00	8.41
ATOM	1698	CB	LYS	A	402	10.415	11.692	23.584	1.00	13.99
ATOM	1699	CG	LYS	A	402	10.761	12.299	22.233	1.00	13.78
ATOM	1700	CD	LYS	A	402	12.152	12.922	22.299	1.00	22.74
ATOM	1701	CE	LYS	A	402	12.260	14.110	21.358	1.00	27.21
ATOM	1702	NZ	LYS	A	402	12.072	13.713	19.936	1.00	27.86
ATOM	1703	C	LYS	A	402	9.233	9.767	22.636	1.00	2.00
ATOM	1704	O	LYS	A	402	8.843	9.841	21.477	1.00	8.89
ATOM	1705	N	GLU	A	403	9.853	8.704	23.139	1.00	4.01
ATOM	1706	CA	GLU	A	403	10.104	7.508	22.340	1.00	5.33
ATOM	1707	CB	GLU	A	403	11.281	7.761	21.407	1.00	10.27
ATOM	1708	CG	GLU	A	403	11.689	6.616	20.504	1.00	12.71
ATOM	1709	CD	GLU	A	403	12.846	6.973	19.589	1.00	12.93
ATOM	1710	OE1	GLU	A	403	13.522	7.996	19.819	1.00	9.64
ATOM	1711	OE2	GLU	A	403	13.076	6.216	18.625	1.00	18.71
ATOM	1712	C	GLU	A	403	10.413	6.342	23.264	1.00	7.20
ATOM	1713	O	GLU	A	403	10.615	6.536	24.467	1.00	12.56
ATOM	1714	N	VAL	A	404	10.368	5.126	22.750	1.00	2.83
ATOM	1715	CA	VAL	A	404	10.688	3.915	23.501	1.00	2.00
ATOM	1716	CB	VAL	A	404	9.471	3.175	24.065	1.00	2.00
ATOM	1717	CG1	VAL	A	404	9.829	1.778	24.575	1.00	2.00
ATOM	1718	CG2	VAL	A	404	8.792	3.900	25.225	1.00	2.00
ATOM	1719	C	VAL	A	404	11.443	3.008	22.518	1.00	2.00
ATOM	1720	O	VAL	A	404	10.752	2.294	21.786	1.00	2.00
ATOM	1721	N	ARG	A	405	12.779	3.083	22.471	1.00	7.41
ATOM	1722	CA	ARG	A	405	13.456	2.265	21.463	1.00	16.89
ATOM	1723	CB	ARG	A	405	14.235	3.107	20.470	1.00	20.18
ATOM	1724	CG	ARG	A	405	15.605	3.653	20.818	1.00	13.55
ATOM	1725	CD	ARG	A	405	15.938	4.722	19.776	1.00	8.74
ATOM	1726	NE	ARG	A	405	17.261	5.306	19.741	1.00	2.00
ATOM	1727	CZ	ARG	A	405	17.482	6.587	19.620	1.00	15.32
ATOM	1728	NH1	ARG	A	405	16.515	7.367	19.149	1.00	12.36
ATOM	1729	NH2	ARG	A	405	18.715	7.053	19.800	1.00	14.30
ATOM	1730	C	ARG	A	405	14.309	1.129	21.997	1.00	22.47
ATOM	1731	O	ARG	A	405	14.731	1.077	23.145	1.00	29.56
ATOM	1732	N	HIS	A	406	14.542	0.167	21.096	1.00	21.05
ATOM	1733	CA	HIS	A	406	15.300	-1.036	21.402	1.00	17.23
ATOM	1734	CB	HIS	A	406	14.464	-2.272	21.061	1.00	20.38
ATOM	1735	CG	HIS	A	406	13.005	-2.216	21.376	1.00	22.00
ATOM	1736	CD2	HIS	A	406	11.913	-2.138	20.575	1.00	16.55
ATOM	1737	ND1	HIS	A	406	12.527	-2.251	22.669	1.00	25.77
ATOM	1738	CE1	HIS	A	406	11.207	-2.190	22.654	1.00	23.80
ATOM	1739	NE2	HIS	A	406	10.808	-2.122	21.396	1.00	19.89
ATOM	1740	C	HIS	A	406	16.630	-1.114	20.655	1.00	19.89
ATOM	1741	O	HIS	A	406	16.927	-2.109	19.986	1.00	15.73
ATOM	1742	N	ASP	A	407	17.440	-0.067	20.768	1.00	19.31
ATOM	1743	CA	ASP	A	407	18.741	-0.022	20.112	1.00	16.24
ATOM	1744	CB	ASP	A	407	19.190	1.425	19.904	1.00	18.98
ATOM	1745	CG	ASP	A	407	20.478	1.541	19.112	1.00	20.03
ATOM	1746	OD1	ASP	A	407	21.117	0.502	18.831	1.00	15.49
ATOM	1747	OD2	ASP	A	407	20.827	2.696	18.775	1.00	20.88
ATOM	1748	C	ASP	A	407	19.782	-0.748	20.954	1.00	15.97
ATOM	1749	O	ASP	A	407	20.067	-0.284	22.063	1.00	14.79

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ATOM	1750	N	ASN	A	408	20.343	-1.829	20.417	1.00	13.67
ATOM	1751	CA	ASN	A	408	21.345	-2.600	21.158	1.00	11.58
ATOM	1752	CB	ASN	A	408	20.973	-4.078	21.218	1.00	2.00
ATOM	1753	CG	ASN	A	408	21.050	-4.816	19.901	1.00	9.07
ATOM	1754	OD1	ASN	A	408	21.250	-4.246	18.827	1.00	11.92
ATOM	1755	ND2	ASN	A	408	20.890	-6.135	19.972	1.00	9.42
ATOM	1756	C	ASN	A	408	22.749	-2.404	20.593	1.00	10.72
ATOM	1757	O	ASN	A	408	23.621	-3.273	20.620	1.00	9.06
ATOM	1758	N	LYS	A	409	22.969	-1.214	20.043	1.00	10.52
ATOM	1759	CA	LYS	A	409	24.258	-0.801	19.508	1.00	2.00
ATOM	1760	CB	LYS	A	409	24.186	-0.359	18.053	1.00	5.61
ATOM	1761	CG	LYS	A	409	23.485	-1.329	17.129	1.00	8.67
ATOM	1762	CD	LYS	A	409	24.261	-2.624	16.941	1.00	8.29
ATOM	1763	CE	LYS	A	409	23.428	-3.622	16.145	1.00	12.08
ATOM	1764	NZ	LYS	A	409	24.232	-4.290	15.081	1.00	23.73
ATOM	1765	C	LYS	A	409	24.763	0.348	20.385	1.00	2.00
ATOM	1766	O	LYS	A	409	25.775	0.987	20.112	1.00	8.80
ATOM	1767	N	VAL	A	410	24.003	0.644	21.439	1.00	2.00
ATOM	1768	CA	VAL	A	410	24.333	1.696	22.388	1.00	2.00
ATOM	1769	CB	VAL	A	410	23.437	2.934	22.191	1.00	2.00
ATOM	1770	CG1	VAL	A	410	23.761	3.659	20.888	1.00	7.51
ATOM	1771	CG2	VAL	A	410	21.964	2.550	22.239	1.00	2.00
ATOM	1772	C	VAL	A	410	24.166	1.229	23.832	1.00	2.00
ATOM	1773	O	VAL	A	410	23.318	0.359	24.068	1.00	10.96
ATOM	1774	N	THR	A	411	24.895	1.800	24.793	1.00	2.00
ATOM	1775	CA	THR	A	411	24.728	1.381	26.179	1.00	5.10
ATOM	1776	CB	THR	A	411	26.029	1.720	26.952	1.00	2.00
ATOM	1777	OG1	THR	A	411	26.594	2.852	26.270	1.00	11.77
ATOM	1778	CG2	THR	A	411	26.954	0.527	26.981	1.00	4.48
ATOM	1779	C	THR	A	411	23.631	2.069	26.976	1.00	12.41
ATOM	1780	O	THR	A	411	23.122	1.507	27.955	1.00	15.70
ATOM	1781	N	TRP	A	412	23.293	3.313	26.647	1.00	12.29
ATOM	1782	CA	TRP	A	412	22.355	4.082	27.441	1.00	9.68
ATOM	1783	CB	TRP	A	412	22.239	5.526	26.963	1.00	7.03
ATOM	1784	CG	TRP	A	412	21.875	5.723	25.538	1.00	2.00
ATOM	1785	CD2	TRP	A	412	20.607	6.007	24.954	1.00	3.39
ATOM	1786	CE2	TRP	A	412	20.788	6.113	23.563	1.00	4.95
ATOM	1787	CE3	TRP	A	412	19.325	6.176	25.484	1.00	2.00
ATOM	1788	CD1	TRP	A	412	22.766	5.680	24.496	1.00	4.03
ATOM	1789	NE1	TRP	A	412	22.120	5.910	23.301	1.00	6.66
ATOM	1790	CZ2	TRP	A	412	19.737	6.385	22.692	1.00	3.62
ATOM	1791	CZ3	TRP	A	412	18.287	6.443	24.613	1.00	11.26
ATOM	1792	CH2	TRP	A	412	18.495	6.549	23.230	1.00	2.21
ATOM	1793	C	TRP	A	412	20.962	3.503	27.644	1.00	11.15
ATOM	1794	O	TRP	A	412	20.450	2.698	26.882	1.00	16.56
ATOM	1795	N	LEU	A	413	20.354	3.964	28.748	1.00	6.46
ATOM	1796	CA	LEU	A	413	19.028	3.567	29.163	1.00	6.82
ATOM	1797	CB	LEU	A	413	18.959	3.213	30.652	1.00	2.00
ATOM	1798	CG	LEU	A	413	19.729	2.037	31.223	1.00	6.87
ATOM	1799	CD1	LEU	A	413	21.234	2.221	31.080	1.00	10.53
ATOM	1800	CD2	LEU	A	413	19.392	1.847	32.702	1.00	2.00
ATOM	1801	C	LEU	A	413	17.982	4.666	28.982	1.00	6.95
ATOM	1802	O	LEU	A	413	16.788	4.389	28.880	1.00	10.63
ATOM	1803	N	VAL	A	414	18.375	5.921	29.126	1.00	8.52
ATOM	1804	CA	VAL	A	414	17.496	7.074	29.061	1.00	2.00
ATOM	1805	CB	VAL	A	414	17.091	7.606	30.447	1.00	7.23
ATOM	1806	CG1	VAL	A	414	16.393	8.956	30.321	1.00	3.09
ATOM	1807	CG2	VAL	A	414	16.193	6.648	31.207	1.00	18.07
ATOM	1808	C	VAL	A	414	18.218	8.247	28.382	1.00	12.81
ATOM	1809	O	VAL	A	414	19.207	8.694	28.983	1.00	17.81
ATOM	1810	N	SER	A	415	17.727	8.779	27.267	1.00	6.12
ATOM	1811	CA	SER	A	415	18.408	9.938	26.688	1.00	6.99
ATOM	1812	CB	SER	A	415	19.021	9.660	25.327	1.00	2.37

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ATOM	1813	OG	SER	A	415	18.361	10.365	24.290	1.00	2.00
ATOM	1814	C	SER	A	415	17.444	11.116	26.557	1.00	11.40
ATOM	1815	O	SER	A	415	16.229	10.922	26.625	1.00	19.78
ATOM	1816	N	TRP	A	416	18.001	12.303	26.340	1.00	2.00
ATOM	1817	CA	TRP	A	416	17.207	13.515	26.168	1.00	6.78
ATOM	1818	CB	TRP	A	416	16.506	13.541	27.438	1.00	4.49
ATOM	1819	CG	TRP	A	416	17.275	14.395	28.627	1.00	3.33
ATOM	1820	CD2	TRP	A	416	17.659	13.599	29.758	1.00	2.00
ATOM	1821	CE2	TRP	A	416	18.335	14.449	30.659	1.00	4.00
ATOM	1822	CE3	TRP	A	416	17.524	12.241	30.061	1.00	2.00
ATOM	1823	CD1	TRP	A	416	17.682	15.669	28.907	1.00	5.53
ATOM	1824	NE1	TRP	A	416	18.336	15.709	30.120	1.00	9.38
ATOM	1825	CZ2	TRP	A	416	18.866	13.997	31.867	1.00	2.00
ATOM	1826	CZ3	TRP	A	416	18.059	11.795	31.259	1.00	9.56
ATOM	1827	CH2	TRP	A	416	18.718	12.663	32.138	1.00	9.70
ATOM	1828	C	TRP	A	416	18.051	14.676	25.651	1.00	10.54
ATOM	1829	O	TRP	A	416	19.281	14.632	25.702	1.00	27.16
ATOM	1830	N	THR	A	417	17.400	15.724	25.160	1.00	5.99
ATOM	1831	CA	THR	A	417	18.134	16.878	24.648	1.00	2.00
ATOM	1832	CB	THR	A	417	17.642	17.315	23.256	1.00	2.00
ATOM	1833	OG1	THR	A	417	17.870	16.271	22.297	1.00	2.00
ATOM	1834	CG2	THR	A	417	18.367	18.563	22.770	1.00	2.00
ATOM	1835	C	THR	A	417	18.052	18.046	25.626	1.00	4.73
ATOM	1836	O	THR	A	417	16.975	18.503	26.002	1.00	2.00
ATOM	1837	N	GLU	A	418	19.214	18.535	26.044	1.00	2.00
ATOM	1838	CA	GLU	A	418	19.286	19.695	26.932	1.00	4.43
ATOM	1839	CB	GLU	A	418	20.559	19.679	27.759	1.00	11.59
ATOM	1840	CG	GLU	A	418	21.854	19.391	27.024	1.00	15.42
ATOM	1841	CD	GLU	A	418	22.661	20.646	26.757	1.00	24.67
ATOM	1842	OE1	GLU	A	418	22.047	21.675	26.404	1.00	24.20
ATOM	1843	OE2	GLU	A	418	23.903	20.607	26.908	1.00	31.05
ATOM	1844	C	GLU	A	418	19.158	20.945	26.071	1.00	6.17
ATOM	1845	O	GLU	A	418	19.645	20.995	24.940	1.00	11.28
ATOM	1846	N	ASN	A	419	18.472	21.957	26.567	1.00	4.86
ATOM	1847	CA	ASN	A	419	18.237	23.184	25.826	1.00	2.00
ATOM	1848	CB	ASN	A	419	17.084	23.984	26.437	1.00	5.96
ATOM	1849	CG	ASN	A	419	17.091	24.182	27.929	1.00	15.34
ATOM	1850	OD1	ASN	A	419	16.630	25.219	28.432	1.00	21.27
ATOM	1851	ND2	ASN	A	419	17.573	23.246	28.739	1.00	15.08
ATOM	1852	C	ASN	A	419	19.445	24.090	25.649	1.00	13.33
ATOM	1853	O	ASN	A	419	19.563	24.662	24.553	1.00	19.86
ATOM	1854	N	ILE	A	420	20.310	24.265	26.640	1.00	9.26
ATOM	1855	CA	ILE	A	420	21.430	25.185	26.524	1.00	6.14
ATOM	1856	CB	ILE	A	420	22.312	25.241	27.787	1.00	2.00
ATOM	1857	CG2	ILE	A	420	22.877	26.655	27.923	1.00	2.00
ATOM	1858	CG1	ILE	A	420	21.575	24.816	29.047	1.00	2.00
ATOM	1859	CD1	ILE	A	420	20.466	25.707	29.545	1.00	2.00
ATOM	1860	C	ILE	A	420	22.343	24.944	25.327	1.00	6.26
ATOM	1861	O	ILE	A	420	22.436	25.796	24.438	1.00	8.61
ATOM	1862	N	GLN	A	421	23.065	23.834	25.297	1.00	10.59
ATOM	1863	CA	GLN	A	421	23.983	23.539	24.200	1.00	11.80
ATOM	1864	CB	GLN	A	421	25.133	22.657	24.697	1.00	11.39
ATOM	1865	CG	GLN	A	421	25.895	23.251	25.872	1.00	16.68
ATOM	1866	CD	GLN	A	421	26.642	24.515	25.493	1.00	24.60
ATOM	1867	OE1	GLN	A	421	26.741	24.865	24.315	1.00	31.49
ATOM	1868	NE2	GLN	A	421	27.166	25.191	26.510	1.00	28.48
ATOM	1869	C	GLN	A	421	23.245	22.844	23.065	1.00	15.70
ATOM	1870	O	GLN	A	421	23.599	22.935	21.893	1.00	18.96
ATOM	1871	N	GLY	A	422	22.205	22.105	23.451	1.00	19.71
ATOM	1872	CA	GLY	A	422	21.398	21.352	22.492	1.00	16.03
ATOM	1873	C	GLY	A	422	21.973	19.941	22.359	1.00	15.02
ATOM	1874	O	GLY	A	422	21.620	19.219	21.426	1.00	20.48
ATOM	1875	N	SER	A	423	22.857	19.571	23.289	1.00	4.69

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ATOM	1876	CA	SER	A 423	23.475	18.250	23.193	1.00	2.00
ATOM	1877	CB	SER	A 423	24.814	18.221	23.927	1.00	2.00
ATOM	1878	OG	SER	A 423	24.727	18.939	25.142	1.00	12.59
ATOM	1879	C	SER	A 423	22.534	17.167	23.701	1.00	2.00
ATOM	1880	O	SER	A 423	21.396	17.468	24.054	1.00	7.38
ATOM	1881	N	ILE	A 424	23.009	15.927	23.676	1.00	2.00
ATOM	1882	CA	ILE	A 424	22.215	14.797	24.143	1.00	2.00
ATOM	1883	CB	ILE	A 424	22.267	13.607	23.159	1.00	2.00
ATOM	1884	CG2	ILE	A 424	21.379	12.474	23.652	1.00	2.00
ATOM	1885	CG1	ILE	A 424	21.875	14.059	21.751	1.00	2.00
ATOM	1886	CD1	ILE	A 424	21.944	13.009	20.671	1.00	2.00
ATOM	1887	C	ILE	A 424	22.716	14.285	25.489	1.00	8.83
ATOM	1888	O	ILE	A 424	23.761	13.623	25.486	1.00	19.23
ATOM	1889	N	LYS	A 425	21.984	14.512	26.575	1.00	6.10
ATOM	1890	CA	LYS	A 425	22.460	13.998	27.867	1.00	2.00
ATOM	1891	CB	LYS	A 425	21.975	14.837	29.031	1.00	6.54
ATOM	1892	CG	LYS	A 425	22.287	16.315	29.007	1.00	10.03
ATOM	1893	CD	LYS	A 425	23.738	16.724	29.056	1.00	20.39
ATOM	1894	CE	LYS	A 425	24.340	17.008	27.691	1.00	26.88
ATOM	1895	NZ	LYS	A 425	25.767	17.447	27.728	1.00	22.10
ATOM	1896	C	LYS	A 425	22.144	12.516	27.982	1.00	3.76
ATOM	1897	O	LYS	A 425	21.548	11.997	27.030	1.00	2.00
ATOM	1898	N	TYR	A 426	22.599	11.738	28.959	1.00	2.00
ATOM	1899	CA	TYR	A 426	22.371	10.309	29.062	1.00	2.00
ATOM	1900	CB	TYR	A 426	23.449	9.489	28.339	1.00	4.40
ATOM	1901	CG	TYR	A 426	23.595	9.617	26.853	1.00	2.00
ATOM	1902	CD1	TYR	A 426	24.576	10.447	26.319	1.00	2.00
ATOM	1903	CE1	TYR	A 426	24.727	10.609	24.956	1.00	4.24
ATOM	1904	CD2	TYR	A 426	22.758	8.964	25.960	1.00	4.91
ATOM	1905	CE2	TYR	A 426	22.902	9.112	24.597	1.00	4.08
ATOM	1906	CZ	TYR	A 426	23.887	9.935	24.100	1.00	3.41
ATOM	1907	OH	TYR	A 426	24.026	10.080	22.737	1.00	9.06
ATOM	1908	C	TYR	A 426	22.403	9.727	30.478	1.00	7.28
ATOM	1909	O	TYR	A 426	23.096	10.204	31.369	1.00	5.11
ATOM	1910	N	ILE	A 427	21.694	8.613	30.647	1.00	7.03
ATOM	1911	CA	ILE	A 427	21.660	7.889	31.915	1.00	2.00
ATOM	1912	CB	ILE	A 427	20.264	7.773	32.536	1.00	2.00
ATOM	1913	CG2	ILE	A 427	20.209	6.664	33.580	1.00	2.00
ATOM	1914	CG1	ILE	A 427	19.861	9.114	33.163	1.00	2.00
ATOM	1915	CD1	ILE	A 427	18.449	9.188	33.698	1.00	10.17
ATOM	1916	C	ILE	A 427	22.276	6.521	31.614	1.00	6.49
ATOM	1917	O	ILE	A 427	21.658	5.674	30.973	1.00	17.94
ATOM	1918	N	MET	A 428	23.525	6.358	32.019	1.00	7.30
ATOM	1919	CA	MET	A 428	24.292	5.152	31.771	1.00	2.00
ATOM	1920	CB	MET	A 428	25.618	5.480	31.065	1.00	5.45
ATOM	1921	CG	MET	A 428	25.416	5.512	29.559	1.00	2.00
ATOM	1922	SD	MET	A 428	26.771	5.321	28.653	1.00	17.72
ATOM	1923	CE	MET	A 428	25.980	6.566	27.094	1.00	2.00
ATOM	1924	C	MET	A 428	24.611	4.380	33.036	1.00	2.00
ATOM	1925	O	MET	A 428	24.492	4.918	34.133	1.00	2.00
ATOM	1926	N	LEU	A 429	25.066	3.140	32.858	1.00	2.00
ATOM	1927	CA	LEU	A 429	25.359	2.317	34.028	1.00	3.69
ATOM	1928	CB	LEU	A 429	25.772	0.898	33.643	1.00	2.00
ATOM	1929	CG	LEU	A 429	24.705	0.017	33.000	1.00	2.00
ATOM	1930	CD1	LEU	A 429	25.235	-1.395	32.829	1.00	2.00
ATOM	1931	CD2	LEU	A 429	23.421	0.000	33.822	1.00	2.00
ATOM	1932	C	LEU	A 429	26.434	2.938	34.912	1.00	7.86
ATOM	1933	O	LEU	A 429	27.068	3.936	34.581	1.00	6.50
ATOM	1934	N	ASN	A 430	26.595	2.301	36.069	1.00	5.59
ATOM	1935	CA	ASN	A 430	27.602	2.714	37.051	1.00	3.56
ATOM	1936	CB	ASN	A 430	27.104	2.392	38.443	1.00	9.64
ATOM	1937	CG	ASN	A 430	28.118	2.302	39.555	1.00	14.13
ATOM	1938	OD1	ASN	A 430	28.113	3.152	40.457	1.00	2.00



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ATOM	1939	ND2	ASN	A	430	28.969	1.279	39.531	1.00	14.33
ATOM	1940	C	ASN	A	430	28.886	1.981	36.718	1.00	2.75
ATOM	1941	O	ASN	A	430	28.851	0.798	36.376	1.00	2.00
ATOM	1942	N	PRO	A	431	30.018	2.664	36.826	1.00	3.45
ATOM	1943	CD	PRO	A	431	30.101	4.091	37.241	1.00	2.70
ATOM	1944	CA	PRO	A	431	31.327	2.133	36.501	1.00	2.00
ATOM	1945	CB	PRO	A	431	32.287	3.123	37.160	1.00	2.00
ATOM	1946	CG	PRO	A	431	31.563	4.421	37.100	1.00	9.73
ATOM	1947	C	PRO	A	431	31.632	0.715	36.904	1.00	2.00
ATOM	1948	O	PRO	A	431	32.272	0.024	36.097	1.00	2.00
ATOM	1949	N	SER	A	432	31.209	0.207	38.054	1.00	3.55
ATOM	1950	CA	SER	A	432	31.460	-1.184	38.411	1.00	4.82
ATOM	1951	CB	SER	A	432	30.837	-1.538	39.760	1.00	4.99
ATOM	1952	OG	SER	A	432	29.419	-1.538	39.710	1.00	2.00
ATOM	1953	C	SER	A	432	30.954	-2.148	37.339	1.00	2.00
ATOM	1954	O	SER	A	432	31.597	-3.172	37.102	1.00	8.96
ATOM	1955	N	SER	A	433	29.822	-1.872	36.711	1.00	6.53
ATOM	1956	CA	SER	A	433	29.221	-2.693	35.684	1.00	16.09
ATOM	1957	CB	SER	A	433	28.185	-1.856	34.910	1.00	16.86
ATOM	1958	OG	SER	A	433	28.823	-0.746	34.295	1.00	18.12
ATOM	1959	C	SER	A	433	30.177	-3.307	34.663	1.00	17.10
ATOM	1960	O	SER	A	433	31.201	-2.740	34.283	1.00	12.70
ATOM	1961	N	ARG	A	434	29.796	-4.489	34.174	1.00	9.94
ATOM	1962	CA	ARG	A	434	30.599	-5.211	33.194	1.00	8.23
ATOM	1963	CB	ARG	A	434	29.900	-6.502	32.779	1.00	4.17
ATOM	1964	CG	ARG	A	434	30.422	-7.101	31.486	1.00	10.07
ATOM	1965	CD	ARG	A	434	29.242	-7.551	30.628	1.00	5.94
ATOM	1966	NE	ARG	A	434	29.406	-7.021	29.274	1.00	12.93
ATOM	1967	CZ	ARG	A	434	28.402	-6.568	28.533	1.00	14.57
ATOM	1968	NH1	ARG	A	434	27.165	-6.589	29.019	1.00	2.00
ATOM	1969	NH2	ARG	A	434	28.627	-6.091	27.313	1.00	9.87
ATOM	1970	C	ARG	A	434	30.873	-4.334	31.989	1.00	2.00
ATOM	1971	O	ARG	A	434	32.010	-3.898	31.772	1.00	9.86
ATOM	1972	N	ILE	A	435	29.851	-3.941	31.247	1.00	6.48
ATOM	1973	CA	ILE	A	435	29.994	-3.081	30.080	1.00	10.40
ATOM	1974	CB	ILE	A	435	28.613	-2.684	29.517	1.00	10.04
ATOM	1975	CG2	ILE	A	435	28.151	-1.334	30.040	1.00	12.66
ATOM	1976	CG1	ILE	A	435	28.675	-2.691	27.987	1.00	6.17
ATOM	1977	CD1	ILE	A	435	27.343	-2.888	27.302	1.00	2.00
ATOM	1978	C	ILE	A	435	30.874	-1.856	30.285	1.00	15.17
ATOM	1979	O	ILE	A	435	31.458	-1.414	29.282	1.00	20.85
ATOM	1980	N	LYS	A	436	30.973	-1.255	31.457	1.00	12.77
ATOM	1981	CA	LYS	A	436	31.861	-0.116	31.804	1.00	8.38
ATOM	1982	CB	LYS	A	436	31.419	0.808	32.788	1.00	3.45
ATOM	1983	CG	LYS	A	436	30.277	1.740	32.442	1.00	2.00
ATOM	1984	CD	LYS	A	436	30.673	2.888	31.514	1.00	2.08
ATOM	1985	CE	LYS	A	436	29.982	4.154	32.018	1.00	2.00
ATOM	1986	NZ	LYS	A	436	30.263	5.336	31.172	1.00	2.00
ATOM	1987	C	LYS	A	436	33.279	-0.629	31.903	1.00	12.40
ATOM	1988	O	LYS	A	436	34.170	-0.375	31.085	1.00	15.72
ATOM	1989	N	GLY	A	437	33.481	-1.382	32.980	1.00	13.74
ATOM	1990	CA	GLY	A	437	34.799	-1.948	33.285	1.00	2.00
ATOM	1991	C	GLY	A	437	35.417	-2.496	31.998	1.00	13.58
ATOM	1992	O	GLY	A	437	36.459	-2.015	31.552	1.00	2.00
ATOM	1993	N	GLU	A	438	34.837	-3.518	31.361	1.00	17.65
ATOM	1994	CA	GLU	A	438	35.381	-4.100	30.140	1.00	15.74
ATOM	1995	CB	GLU	A	438	34.359	-4.882	29.308	1.00	16.77
ATOM	1996	CG	GLU	A	438	35.008	-5.649	28.163	1.00	22.75
ATOM	1997	CD	GLU	A	438	34.347	-6.991	27.906	1.00	34.77
ATOM	1998	OE1	GLU	A	438	34.225	-7.352	26.715	1.00	38.96
ATOM	1999	OE2	GLU	A	438	33.960	-7.673	28.879	1.00	35.61
ATOM	2000	C	GLU	A	438	36.029	-3.066	29.228	1.00	12.73
ATOM	2001	O	GLU	A	438	37.210	-3.191	28.904	1.00	20.30

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ATOM	2002	N	LYS	A	439	35.296	-2.035	28.829	1.00	9.78
ATOM	2003	CA	LYS	A	439	35.843	-0.979	27.991	1.00	5.70
ATOM	2004	CB	LYS	A	439	34.782	0.081	27.716	1.00	2.00
ATOM	2005	CG	LYS	A	439	35.128	0.980	26.546	1.00	2.00
ATOM	2006	CD	LYS	A	439	34.445	0.597	25.255	1.00	7.53
ATOM	2007	CE	LYS	A	439	34.934	-0.693	24.639	1.00	14.85
ATOM	2008	NZ	LYS	A	439	34.431	-1.923	25.303	1.00	18.72
ATOM	2009	C	LYS	A	439	37.039	-0.298	28.650	1.00	8.66
ATOM	2010	O	LYS	A	439	38.021	0.025	27.986	1.00	2.00
ATOM	2011	N	ASP	A	440	36.951	-0.065	29.954	1.00	9.71
ATOM	2012	CA	ASP	A	440	38.025	0.529	30.742	1.00	3.69
ATOM	2013	CB	ASP	A	440	37.557	0.680	32.189	1.00	9.31
ATOM	2014	CG	ASP	A	440	38.115	1.849	32.962	1.00	11.27
ATOM	2015	OD1	ASP	A	440	38.400	2.877	32.306	1.00	2.00
ATOM	2016	OD2	ASP	A	440	38.236	1.720	34.203	1.00	15.06
ATOM	2017	C	ASP	A	440	39.233	-0.394	30.703	1.00	2.07
ATOM	2018	O	ASP	A	440	40.346	0.093	30.548	1.00	11.82
ATOM	2019	N	TRP	A	441	39.034	-1.698	30.845	1.00	2.00
ATOM	2020	CA	TRP	A	441	40.115	-2.676	30.838	1.00	4.03
ATOM	2021	CB	TRP	A	441	39.540	-4.059	31.114	1.00	8.70
ATOM	2022	CG	TRP	A	441	40.477	-5.221	31.117	1.00	10.33
ATOM	2023	CD2	TRP	A	441	40.098	-6.606	31.107	1.00	9.02
ATOM	2024	CE2	TRP	A	441	41.284	-7.367	31.142	1.00	12.34
ATOM	2025	CE3	TRP	A	441	38.873	-7.278	31.071	1.00	6.14
ATOM	2026	CD1	TRP	A	441	41.841	-5.207	31.170	1.00	13.86
ATOM	2027	NE1	TRP	A	441	42.333	-6.488	31.175	1.00	17.60
ATOM	2028	CZ2	TRP	A	441	41.282	-8.761	31.136	1.00	12.32
ATOM	2029	CZ3	TRP	A	441	38.874	-8.663	31.064	1.00	5.72
ATOM	2030	CH2	TRP	A	441	40.067	-9.393	31.096	1.00	4.77
ATOM	2031	C	TRP	A	441	40.845	-2.641	29.506	1.00	2.00
ATOM	2032	O	TRP	A	441	42.070	-2.553	29.429	1.00	2.00
ATOM	2033	N	GLN	A	442	40.059	-2.656	28.423	1.00	9.07
ATOM	2034	CA	GLN	A	442	40.628	-2.572	27.080	1.00	10.40
ATOM	2035	CB	GLN	A	442	39.551	-2.800	26.026	1.00	16.09
ATOM	2036	CG	GLN	A	442	38.935	-4.190	26.116	1.00	23.41
ATOM	2037	CD	GLN	A	442	37.671	-4.350	25.298	1.00	34.21
ATOM	2038	OE1	GLN	A	442	37.151	-5.467	25.193	1.00	37.29
ATOM	2039	NE2	GLN	A	442	37.152	-3.272	24.717	1.00	33.60
ATOM	2040	C	GLN	A	442	41.357	-1.247	26.906	1.00	9.86
ATOM	2041	O	GLN	A	442	42.436	-1.220	26.308	1.00	17.49
ATOM	2042	N	LYS	A	443	40.840	-0.159	27.467	1.00	2.00
ATOM	2043	CA	LYS	A	443	41.512	1.133	27.425	1.00	5.79
ATOM	2044	CB	LYS	A	443	40.843	2.135	28.365	1.00	5.05
ATOM	2045	CG	LYS	A	443	41.423	3.528	28.299	1.00	2.00
ATOM	2046	CD	LYS	A	443	40.626	4.568	29.051	1.00	2.00
ATOM	2047	CE	LYS	A	443	40.686	4.394	30.558	1.00	2.00
ATOM	2048	NZ	LYS	A	443	39.995	5.511	31.266	1.00	2.00
ATOM	2049	C	LYS	A	443	42.975	0.947	27.822	1.00	5.83
ATOM	2050	O	LYS	A	443	43.855	1.210	27.000	1.00	5.90
ATOM	2051	N	TYR	A	444	43.212	0.483	29.052	1.00	2.00
ATOM	2052	CA	TYR	A	444	44.585	0.251	29.500	1.00	6.48
ATOM	2053	CB	TYR	A	444	44.577	-0.180	30.968	1.00	3.95
ATOM	2054	CG	TYR	A	444	43.994	0.983	31.761	1.00	2.00
ATOM	2055	CD1	TYR	A	444	44.677	2.197	31.762	1.00	2.00
ATOM	2056	CE1	TYR	A	444	44.182	3.284	32.453	1.00	2.00
ATOM	2057	CD2	TYR	A	444	42.804	0.894	32.458	1.00	2.00
ATOM	2058	CE2	TYR	A	444	42.305	1.983	33.149	1.00	2.00
ATOM	2059	CZ	TYR	A	444	43.001	3.172	33.141	1.00	2.00
ATOM	2060	OH	TYR	A	444	42.539	4.276	33.819	1.00	11.78
ATOM	2061	C	TYR	A	444	45.329	-0.683	28.577	1.00	14.32
ATOM	2062	O	TYR	A	444	46.284	-0.203	27.943	1.00	2.00
ATOM	2063	N	GLU	A	445	44.875	-1.912	28.341	1.00	18.86
ATOM	2064	CA	GLU	A	445	45.544	-2.786	27.375	1.00	14.41

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ATOM	2065	CB	GLU	A	445	44.679	-3.981	26.991	1.00	20.05
ATOM	2066	CG	GLU	A	445	44.219	-4.850	28.151	1.00	23.84
ATOM	2067	CD	GLU	A	445	45.347	-5.684	28.736	1.00	26.19
ATOM	2068	OE1	GLU	A	445	45.495	-5.694	29.979	1.00	16.99
ATOM	2069	OE2	GLU	A	445	46.068	-6.326	27.937	1.00	22.05
ATOM	2070	C	GLU	A	445	45.935	-1.974	26.145	1.00	15.36
ATOM	2071	O	GLU	A	445	47.121	-1.979	25.800	1.00	26.43
ATOM	2072	N	THR	A	446	45.035	-1.220	25.517	1.00	6.32
ATOM	2073	CA	THR	A	446	45.384	-0.381	24.376	1.00	8.56
ATOM	2074	CB	THR	A	446	44.241	0.557	23.950	1.00	2.00
ATOM	2075	OG1	THR	A	446	43.087	-0.194	23.536	1.00	6.84
ATOM	2076	CG2	THR	A	446	44.663	1.461	22.800	1.00	2.00
ATOM	2077	C	THR	A	446	46.641	0.439	24.660	1.00	9.26
ATOM	2078	O	THR	A	446	47.601	0.394	23.883	1.00	16.80
ATOM	2079	N	ALA	A	447	46.686	1.169	25.772	1.00	8.36
ATOM	2080	CA	ALA	A	447	47.884	1.925	26.137	1.00	8.00
ATOM	2081	CB	ALA	A	447	47.696	2.694	27.434	1.00	2.00
ATOM	2082	C	ALA	A	447	49.074	0.971	26.246	1.00	9.19
ATOM	2083	O	ALA	A	447	50.130	1.242	25.672	1.00	7.56
ATOM	2084	N	ARG	A	448	48.909	-0.159	26.937	1.00	7.48
ATOM	2085	CA	ARG	A	448	49.973	-1.148	27.049	1.00	2.00
ATOM	2086	CB	ARG	A	448	49.523	-2.398	27.796	1.00	3.54
ATOM	2087	CG	ARG	A	448	49.275	-2.156	29.279	1.00	2.00
ATOM	2088	CD	ARG	A	448	48.960	-3.463	29.980	1.00	6.96
ATOM	2089	NE	ARG	A	448	50.103	-4.367	30.030	1.00	5.66
ATOM	2090	CZ	ARG	A	448	50.012	-5.624	30.460	1.00	21.17
ATOM	2091	NH1	ARG	A	448	48.843	-6.111	30.863	1.00	27.43
ATOM	2092	NH2	ARG	A	448	51.090	-6.401	30.489	1.00	19.57
ATOM	2093	C	ARG	A	448	50.506	-1.515	25.671	1.00	2.52
ATOM	2094	O	ARG	A	448	51.723	-1.438	25.466	1.00	4.54
ATOM	2095	N	ARG	A	449	49.645	-1.872	24.721	1.00	2.00
ATOM	2096	CA	ARG	A	449	50.137	-2.184	23.373	1.00	8.35
ATOM	2097	CB	ARG	A	449	49.010	-2.483	22.389	1.00	13.29
ATOM	2098	CG	ARG	A	449	48.232	-3.735	22.775	1.00	23.04
ATOM	2099	CD	ARG	A	449	47.488	-4.358	21.611	1.00	25.18
ATOM	2100	NE	ARG	A	449	46.332	-3.588	21.175	1.00	24.78
ATOM	2101	CZ	ARG	A	449	46.296	-2.770	20.132	1.00	24.03
ATOM	2102	NH1	ARG	A	449	47.370	-2.605	19.369	1.00	15.19
ATOM	2103	NH2	ARG	A	449	45.181	-2.111	19.830	1.00	29.31
ATOM	2104	C	ARG	A	449	51.024	-1.057	22.870	1.00	10.04
ATOM	2105	O	ARG	A	449	52.188	-1.295	22.522	1.00	20.77
ATOM	2106	N	LEU	A	450	50.549	0.184	22.905	1.00	5.27
ATOM	2107	CA	LEU	A	450	51.370	1.324	22.515	1.00	5.72
ATOM	2108	CB	LEU	A	450	50.639	2.624	22.855	1.00	2.00
ATOM	2109	CG	LEU	A	450	51.469	3.908	22.870	1.00	2.00
ATOM	2110	CD1	LEU	A	450	51.770	4.379	21.460	1.00	7.43
ATOM	2111	CD2	LEU	A	450	50.745	4.982	23.665	1.00	2.00
ATOM	2112	C	LEU	A	450	52.745	1.313	23.162	1.00	2.00
ATOM	2113	O	LEU	A	450	53.731	1.599	22.468	1.00	8.65
ATOM	2114	N	LYS	A	451	52.909	0.966	24.438	1.00	10.25
ATOM	2115	CA	LYS	A	451	54.203	0.918	25.097	1.00	11.87
ATOM	2116	CB	LYS	A	451	54.099	0.433	26.549	1.00	12.42
ATOM	2117	CG	LYS	A	451	55.438	0.262	27.247	1.00	15.72
ATOM	2118	CD	LYS	A	451	55.410	-0.655	28.451	1.00	22.59
ATOM	2119	CE	LYS	A	451	54.930	-2.058	28.109	1.00	31.53
ATOM	2120	NZ	LYS	A	451	53.440	-2.167	28.172	1.00	26.00
ATOM	2121	C	LYS	A	451	55.230	0.072	24.356	1.00	17.91
ATOM	2122	O	LYS	A	451	56.422	0.401	24.437	1.00	29.20
ATOM	2123	N	LYS	A	452	54.848	-0.975	23.631	1.00	20.80
ATOM	2124	CA	LYS	A	452	55.806	-1.780	22.889	1.00	26.02
ATOM	2125	CB	LYS	A	452	55.436	-3.263	22.940	1.00	20.91
ATOM	2126	CG	LYS	A	452	54.229	-3.679	22.123	1.00	13.62
ATOM	2127	CD	LYS	A	452	53.893	-5.145	22.374	1.00	19.81

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ATOM	2128	CE	LYS	A	452	52.446	-5.461	22.036	1.00	22.27
ATOM	2129	NZ	LYS	A	452	52.132	-6.911	22.184	1.00	18.92
ATOM	2130	C	LYS	A	452	55.976	-1.324	21.444	1.00	30.00
ATOM	2131	O	LYS	A	452	56.389	-2.099	20.573	1.00	41.94
ATOM	2132	N	CYS	A	453	55.697	-0.060	21.154	1.00	23.73
ATOM	2133	CA	CYS	A	453	55.828	0.483	19.809	1.00	20.55
ATOM	2134	CB	CYS	A	453	54.752	-0.093	18.890	1.00	23.76
ATOM	2135	SG	CYS	A	453	53.087	-0.087	19.614	1.00	35.06
ATOM	2136	C	CYS	A	453	55.754	2.006	19.852	1.00	20.74
ATOM	2137	O	CYS	A	453	55.284	2.646	18.911	1.00	21.64
ATOM	2138	N	VAL	A	454	56.203	2.562	20.979	1.00	15.60
ATOM	2139	CA	VAL	A	454	56.207	4.016	21.132	1.00	15.86
ATOM	2140	CB	VAL	A	454	56.003	4.478	22.578	1.00	12.35
ATOM	2141	CG1	VAL	A	454	57.038	3.880	23.517	1.00	5.90
ATOM	2142	CG2	VAL	A	454	56.041	6.002	22.652	1.00	16.68
ATOM	2143	C	VAL	A	454	57.528	4.550	20.584	1.00	18.78
ATOM	2144	O	VAL	A	454	57.574	5.521	19.831	1.00	16.16
ATOM	2145	N	ASP	A	455	58.608	3.839	20.919	1.00	22.87
ATOM	2146	CA	ASP	A	455	59.928	4.244	20.433	1.00	24.91
ATOM	2147	CB	ASP	A	455	61.032	3.335	20.951	1.00	31.78
ATOM	2148	CG	ASP	A	455	62.365	4.055	21.056	1.00	40.11
ATOM	2149	OD1	ASP	A	455	62.383	5.305	21.022	1.00	40.63
ATOM	2150	OD2	ASP	A	455	63.399	3.362	21.177	1.00	49.07
ATOM	2151	C	ASP	A	455	59.863	4.273	18.909	1.00	19.47
ATOM	2152	O	ASP	A	455	60.156	5.296	18.292	1.00	23.16
ATOM	2153	N	LYS	A	456	59.382	3.174	18.329	1.00	2.00
ATOM	2154	CA	LYS	A	456	59.215	3.128	16.869	1.00	10.80
ATOM	2155	CB	LYS	A	456	58.400	1.897	16.492	1.00	15.44
ATOM	2156	CG	LYS	A	456	57.627	1.977	15.193	1.00	22.32
ATOM	2157	CD	LYS	A	456	56.727	0.764	14.997	1.00	23.74
ATOM	2158	CE	LYS	A	456	55.456	1.161	14.260	1.00	28.47
ATOM	2159	NZ	LYS	A	456	55.708	1.999	13.057	1.00	24.81
ATOM	2160	C	LYS	A	456	58.592	4.429	16.382	1.00	14.19
ATOM	2161	O	LYS	A	456	59.250	5.192	15.672	1.00	14.73
ATOM	2162	N	ILE	A	457	57.368	4.736	16.809	1.00	19.88
ATOM	2163	CA	ILE	A	457	56.685	5.972	16.448	1.00	14.67
ATOM	2164	CB	ILE	A	457	55.297	6.061	17.110	1.00	9.94
ATOM	2165	CG2	ILE	A	457	54.646	7.402	16.804	1.00	11.10
ATOM	2166	CG1	ILE	A	457	54.414	4.904	16.632	1.00	2.00
ATOM	2167	CD1	ILE	A	457	53.106	4.745	17.377	1.00	2.00
ATOM	2168	C	ILE	A	457	57.511	7.208	16.795	1.00	20.13
ATOM	2169	O	ILE	A	457	57.618	8.122	15.969	1.00	23.75
ATOM	2170	N	ARG	A	458	58.103	7.248	17.989	1.00	16.58
ATOM	2171	CA	ARG	A	458	58.944	8.382	18.368	1.00	16.60
ATOM	2172	CB	ARG	A	458	59.607	8.114	19.721	1.00	7.72
ATOM	2173	CG	ARG	A	458	58.602	8.189	20.856	1.00	2.88
ATOM	2174	CD	ARG	A	458	59.192	7.991	22.243	1.00	4.87
ATOM	2175	NE	ARG	A	458	58.234	8.412	23.264	1.00	2.00
ATOM	2176	CZ	ARG	A	458	58.194	8.012	24.525	1.00	2.00
ATOM	2177	NH1	ARG	A	458	59.069	7.135	24.998	1.00	2.00
ATOM	2178	NH2	ARG	A	458	57.258	8.472	25.348	1.00	5.95
ATOM	2179	C	ARG	A	458	59.930	8.680	17.246	1.00	21.46
ATOM	2180	O	ARG	A	458	59.846	9.744	16.617	1.00	25.55
ATOM	2181	N	ASN	A	459	60.787	7.724	16.896	1.00	20.47
ATOM	2182	CA	ASN	A	459	61.740	7.917	15.805	1.00	23.33
ATOM	2183	CB	ASN	A	459	62.515	6.630	15.510	1.00	21.80
ATOM	2184	CG	ASN	A	459	63.195	6.038	16.730	1.00	25.64
ATOM	2185	OD1	ASN	A	459	63.314	4.814	16.864	1.00	19.73
ATOM	2186	ND2	ASN	A	459	63.647	6.896	17.641	1.00	27.72
ATOM	2187	C	ASN	A	459	61.030	8.450	14.563	1.00	20.90
ATOM	2188	O	ASN	A	459	61.396	9.502	14.025	1.00	19.73
ATOM	2189	N	GLN	A	460	59.963	7.789	14.128	1.00	13.12
ATOM	2190	CA	GLN	A	460	59.222	8.194	12.953	1.00	16.63

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ATOM	2191	CB	GLN	A	460	57.977	7.305	12.747	1.00	13.87
ATOM	2192	CG	GLN	A	460	57.488	7.453	11.311	1.00	23.97
ATOM	2193	CD	GLN	A	460	56.301	6.599	10.945	1.00	25.34
ATOM	2194	OE1	GLN	A	460	55.437	7.031	10.177	1.00	25.36
ATOM	2195	NE2	GLN	A	460	56.233	5.380	11.467	1.00	26.19
ATOM	2196	C	GLN	A	460	58.789	9.652	12.899	1.00	17.16
ATOM	2197	O	GLN	A	460	58.938	10.273	11.835	1.00	11.23
ATOM	2198	N	TYR	A	461	58.242	10.206	13.981	1.00	20.98
ATOM	2199	CA	TYR	A	461	57.810	11.606	13.941	1.00	25.47
ATOM	2200	CB	TYR	A	461	56.738	11.949	14.954	1.00	28.24
ATOM	2201	CG	TYR	A	461	57.050	11.964	16.426	1.00	23.37
ATOM	2202	CD1	TYR	A	461	58.069	12.735	16.963	1.00	20.41
ATOM	2203	CE1	TYR	A	461	58.338	12.746	18.315	1.00	25.29
ATOM	2204	CD2	TYR	A	461	56.282	11.215	17.312	1.00	23.14
ATOM	2205	CE2	TYR	A	461	56.539	11.217	18.672	1.00	27.10
ATOM	2206	CZ	TYR	A	461	57.569	11.985	19.169	1.00	25.47
ATOM	2207	OH	TYR	A	461	57.844	12.007	20.518	1.00	21.85
ATOM	2208	C	TYR	A	461	58.996	12.562	14.036	1.00	24.46
ATOM	2209	O	TYR	A	461	58.917	13.675	13.509	1.00	23.01
ATOM	2210	N	ARG	A	462	60.081	12.130	14.679	1.00	24.27
ATOM	2211	CA	ARG	A	462	61.285	12.957	14.759	1.00	25.47
ATOM	2212	CB	ARG	A	462	62.360	12.342	15.643	1.00	20.93
ATOM	2213	CG	ARG	A	462	62.112	12.501	17.139	1.00	18.08
ATOM	2214	CD	ARG	A	462	63.334	12.051	17.926	1.00	23.53
ATOM	2215	NE	ARG	A	462	64.520	12.804	17.530	1.00	31.08
ATOM	2216	CZ	ARG	A	462	65.710	12.745	18.114	1.00	34.06
ATOM	2217	NH1	ARG	A	462	66.701	13.497	17.647	1.00	37.72
ATOM	2218	NH2	ARG	A	462	65.927	11.953	19.156	1.00	36.20
ATOM	2219	C	ARG	A	462	61.813	13.180	13.343	1.00	26.11
ATOM	2220	O	ARG	A	462	62.117	14.302	12.946	1.00	31.49
ATOM	2221	N	GLU	A	463	61.821	12.115	12.542	1.00	25.92
ATOM	2222	CA	GLU	A	463	62.219	12.185	11.145	1.00	24.02
ATOM	2223	CB	GLU	A	463	62.360	10.798	10.517	1.00	19.25
ATOM	2224	CG	GLU	A	463	63.507	9.964	11.064	1.00	24.18
ATOM	2225	CD	GLU	A	463	63.292	8.490	10.761	1.00	28.39
ATOM	2226	OE1	GLU	A	463	62.166	8.001	10.998	1.00	29.35
ATOM	2227	OE2	GLU	A	463	64.259	7.859	10.292	1.00	33.15
ATOM	2228	C	GLU	A	463	61.201	12.966	10.324	1.00	27.73
ATOM	2229	O	GLU	A	463	61.559	13.606	9.332	1.00	39.84
ATOM	2230	N	ASP	A	464	59.937	12.980	10.745	1.00	25.91
ATOM	2231	CA	ASP	A	464	58.888	13.710	10.049	1.00	25.02
ATOM	2232	CB	ASP	A	464	57.502	13.154	10.381	1.00	26.96
ATOM	2233	CG	ASP	A	464	57.185	11.840	9.697	1.00	31.75
ATOM	2234	OD1	ASP	A	464	57.964	11.386	8.830	1.00	37.29
ATOM	2235	OD2	ASP	A	464	56.136	11.235	10.016	1.00	31.45
ATOM	2236	C	ASP	A	464	58.927	15.214	10.286	1.00	22.31
ATOM	2237	O	ASP	A	464	58.091	15.947	9.746	1.00	24.54
ATOM	2238	N	TRP	A	465	59.903	15.718	11.033	1.00	14.02
ATOM	2239	CA	TRP	A	465	60.113	17.133	11.251	1.00	14.72
ATOM	2240	CB	TRP	A	465	60.787	17.449	12.579	1.00	4.28
ATOM	2241	CG	TRP	A	465	60.053	17.062	13.815	1.00	2.00
ATOM	2242	CD2	TRP	A	465	60.634	16.738	15.088	1.00	6.23
ATOM	2243	CE2	TRP	A	465	59.578	16.460	15.975	1.00	5.28
ATOM	2244	CE3	TRP	A	465	61.948	16.657	15.561	1.00	12.94
ATOM	2245	CD1	TRP	A	465	58.703	16.983	13.990	1.00	2.00
ATOM	2246	NE1	TRP	A	465	58.404	16.612	15.280	1.00	2.00
ATOM	2247	CZ2	TRP	A	465	59.792	16.104	17.304	1.00	5.14
ATOM	2248	CZ3	TRP	A	465	62.162	16.304	16.881	1.00	11.70
ATOM	2249	CH2	TRP	A	465	61.084	16.030	17.735	1.00	13.08
ATOM	2250	C	TRP	A	465	61.007	17.692	10.133	1.00	21.39
ATOM	2251	O	TRP	A	465	61.243	18.899	10.073	1.00	27.87
ATOM	2252	N	LYS	A	466	61.523	16.806	9.287	1.00	15.75
ATOM	2253	CA	LYS	A	466	62.374	17.185	8.179	1.00	21.80

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ATOM	2254	CB	LYS	A	466	63.652	16.342	8.150	1.00	23.77
ATOM	2255	CG	LYS	A	466	64.577	16.469	9.346	1.00	27.52
ATOM	2256	CD	LYS	A	466	65.946	15.877	9.028	1.00	27.22
ATOM	2257	CE	LYS	A	466	66.757	15.626	10.288	1.00	28.67
ATOM	2258	NZ	LYS	A	466	66.996	16.874	11.063	1.00	29.51
ATOM	2259	C	LYS	A	466	61.682	17.023	6.828	1.00	23.74
ATOM	2260	O	LYS	A	466	62.172	17.536	5.821	1.00	22.30
ATOM	2261	N	SER	A	467	60.583	16.283	6.780	1.00	30.07
ATOM	2262	CA	SER	A	467	59.864	16.032	5.540	1.00	29.34
ATOM	2263	CB	SER	A	467	58.475	15.456	5.852	1.00	29.28
ATOM	2264	OG	SER	A	467	57.668	16.508	6.364	1.00	30.12
ATOM	2265	C	SER	A	467	59.642	17.291	4.711	1.00	31.24
ATOM	2266	O	SER	A	467	59.525	18.389	5.254	1.00	34.72
ATOM	2267	N	LYS	A	468	59.507	17.117	3.401	1.00	30.72
ATOM	2268	CA	LYS	A	468	59.274	18.231	2.493	1.00	31.92
ATOM	2269	CB	LYS	A	468	59.344	17.741	1.039	1.00	30.54
ATOM	2270	CG	LYS	A	468	60.703	17.879	0.380	1.00	34.77
ATOM	2271	CD	LYS	A	468	60.878	16.943	-0.800	1.00	38.35
ATOM	2272	CE	LYS	A	468	59.903	17.162	-1.936	1.00	36.79
ATOM	2273	NZ	LYS	A	468	60.122	18.435	-2.675	1.00	36.22
ATOM	2274	C	LYS	A	468	57.944	18.939	2.727	1.00	29.18
ATOM	2275	O	LYS	A	468	57.858	20.169	2.698	1.00	29.99
ATOM	2276	N	GLU	A	469	56.882	18.179	2.952	1.00	28.54
ATOM	2277	CA	GLU	A	469	55.542	18.718	3.134	1.00	29.94
ATOM	2278	CB	GLU	A	469	54.533	17.571	2.963	1.00	22.46
ATOM	2279	CG	GLU	A	469	53.253	18.025	2.280	1.00	24.61
ATOM	2280	CD	GLU	A	469	52.407	16.880	1.763	1.00	26.22
ATOM	2281	OE1	GLU	A	469	52.897	15.735	1.654	1.00	24.00
ATOM	2282	OE2	GLU	A	469	51.222	17.147	1.461	1.00	29.43
ATOM	2283	C	GLU	A	469	55.312	19.412	4.466	1.00	33.43
ATOM	2284	O	GLU	A	469	55.754	18.929	5.512	1.00	36.55
ATOM	2285	N	MET	A	470	54.593	20.539	4.440	1.00	31.23
ATOM	2286	CA	MET	A	470	54.315	21.288	5.662	1.00	29.66
ATOM	2287	CB	MET	A	470	53.834	22.713	5.380	1.00	35.02
ATOM	2288	CG	MET	A	470	53.352	23.462	6.608	1.00	43.56
ATOM	2289	SD	MET	A	470	54.565	24.439	7.486	1.00	57.02
ATOM	2290	CE	MET	A	470	56.000	23.376	7.566	1.00	49.85
ATOM	2291	C	MET	A	470	53.311	20.586	6.568	1.00	24.37
ATOM	2292	O	MET	A	470	53.467	20.586	7.794	1.00	22.43
ATOM	2293	N	LYS	A	471	52.284	19.988	5.973	1.00	19.53
ATOM	2294	CA	LYS	A	471	51.284	19.251	6.745	1.00	15.84
ATOM	2295	CB	LYS	A	471	50.260	18.592	5.829	1.00	17.50
ATOM	2296	CG	LYS	A	471	49.730	19.492	4.724	1.00	27.46
ATOM	2297	CD	LYS	A	471	48.830	18.731	3.758	1.00	31.64
ATOM	2298	CE	LYS	A	471	48.476	19.583	2.548	1.00	37.25
ATOM	2299	NZ	LYS	A	471	49.696	20.032	1.813	1.00	37.06
ATOM	2300	C	LYS	A	471	51.993	18.205	7.598	1.00	19.34
ATOM	2301	O	LYS	A	471	51.894	18.203	8.825	1.00	24.47
ATOM	2302	N	VAL	A	472	52.817	17.369	6.969	1.00	22.27
ATOM	2303	CA	VAL	A	472	53.583	16.345	7.663	1.00	24.37
ATOM	2304	CB	VAL	A	472	54.526	15.583	6.714	1.00	22.74
ATOM	2305	CG1	VAL	A	472	54.996	14.298	7.384	1.00	24.62
ATOM	2306	CG2	VAL	A	472	53.833	15.277	5.396	1.00	29.56
ATOM	2307	C	VAL	A	472	54.397	16.902	8.825	1.00	27.39
ATOM	2308	O	VAL	A	472	54.476	16.270	9.885	1.00	33.91
ATOM	2309	N	ARG	A	473	55.014	18.067	8.653	1.00	25.34
ATOM	2310	CA	ARG	A	473	55.788	18.707	9.705	1.00	20.78
ATOM	2311	CB	ARG	A	473	56.502	19.959	9.194	1.00	24.45
ATOM	2312	CG	ARG	A	473	57.498	19.735	8.072	1.00	26.90
ATOM	2313	CD	ARG	A	473	58.577	20.814	8.088	1.00	31.34
ATOM	2314	NE	ARG	A	473	59.715	20.417	7.265	1.00	40.75
ATOM	2315	CZ	ARG	A	473	60.894	21.020	7.231	1.00	43.70
ATOM	2316	NH1	ARG	A	473	61.122	22.084	7.992	1.00	51.00

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ATOM	2317	NH2	ARG	A	473	61.843	20.548	6.432	1.00	41.94
ATOM	2318	C	ARG	A	473	54.892	19.090	10.884	1.00	16.62
ATOM	2319	O	ARG	A	473	55.236	18.868	12.047	1.00	6.44
ATOM	2320	N	GLN	A	474	53.732	19.668	10.580	1.00	12.97
ATOM	2321	CA	GLN	A	474	52.797	20.083	11.627	1.00	17.09
ATOM	2322	CB	GLN	A	474	51.624	20.842	11.001	1.00	16.54
ATOM	2323	CG	GLN	A	474	52.103	22.020	10.162	1.00	23.93
ATOM	2324	CD	GLN	A	474	51.015	23.048	9.939	1.00	25.39
ATOM	2325	OE1	GLN	A	474	49.851	22.755	10.215	1.00	20.49
ATOM	2326	NE2	GLN	A	474	51.416	24.219	9.455	1.00	22.38
ATOM	2327	C	GLN	A	474	52.291	18.890	12.424	1.00	17.41
ATOM	2328	O	GLN	A	474	52.372	18.827	13.653	1.00	11.65
ATOM	2329	N	ARG	A	475	51.803	17.893	11.687	1.00	16.67
ATOM	2330	CA	ARG	A	475	51.314	16.648	12.265	1.00	17.66
ATOM	2331	CB	ARG	A	475	51.010	15.645	11.152	1.00	16.19
ATOM	2332	CG	ARG	A	475	50.526	14.291	11.646	1.00	18.89
ATOM	2333	CD	ARG	A	475	50.012	13.437	10.497	1.00	19.04
ATOM	2334	NE	ARG	A	475	51.076	12.712	9.816	1.00	20.93
ATOM	2335	CZ	ARG	A	475	51.003	12.222	8.585	1.00	25.58
ATOM	2336	NH1	ARG	A	475	49.904	12.371	7.855	1.00	30.13
ATOM	2337	NH2	ARG	A	475	52.045	11.575	8.077	1.00	27.20
ATOM	2338	C	ARG	A	475	52.349	16.069	13.228	1.00	22.18
ATOM	2339	O	ARG	A	475	52.037	15.748	14.376	1.00	18.61
ATOM	2340	N	ALA	A	476	53.589	15.959	12.745	1.00	17.65
ATOM	2341	CA	ALA	A	476	54.671	15.467	13.588	1.00	17.95
ATOM	2342	CB	ALA	A	476	55.963	15.418	12.790	1.00	16.04
ATOM	2343	C	ALA	A	476	54.824	16.341	14.829	1.00	16.09
ATOM	2344	O	ALA	A	476	54.775	15.834	15.952	1.00	17.66
ATOM	2345	N	VAL	A	477	54.976	17.652	14.643	1.00	10.60
ATOM	2346	CA	VAL	A	477	55.172	18.549	15.782	1.00	6.31
ATOM	2347	CB	VAL	A	477	55.362	20.008	15.342	1.00	2.00
ATOM	2348	CG1	VAL	A	477	55.398	20.947	16.540	1.00	2.00
ATOM	2349	CG2	VAL	A	477	56.647	20.141	14.529	1.00	2.00
ATOM	2350	C	VAL	A	477	54.065	18.409	16.813	1.00	16.64
ATOM	2351	O	VAL	A	477	54.352	18.180	17.997	1.00	14.49
ATOM	2352	N	ALA	A	478	52.801	18.497	16.386	1.00	19.75
ATOM	2353	CA	ALA	A	478	51.687	18.329	17.328	1.00	12.07
ATOM	2354	CB	ALA	A	478	50.344	18.479	16.652	1.00	13.05
ATOM	2355	C	ALA	A	478	51.825	16.981	18.029	1.00	11.54
ATOM	2356	O	ALA	A	478	51.723	16.941	19.258	1.00	16.23
ATOM	2357	N	LEU	A	479	52.122	15.904	17.296	1.00	3.92
ATOM	2358	CA	LEU	A	479	52.363	14.617	17.940	1.00	2.00
ATOM	2359	CB	LEU	A	479	52.943	13.584	16.997	1.00	8.68
ATOM	2360	CG	LEU	A	479	52.066	12.627	16.209	1.00	5.19
ATOM	2361	CD1	LEU	A	479	52.595	12.481	14.786	1.00	16.24
ATOM	2362	CD2	LEU	A	479	52.031	11.264	16.887	1.00	7.01
ATOM	2363	C	LEU	A	479	53.350	14.859	19.090	1.00	9.79
ATOM	2364	O	LEU	A	479	53.006	14.592	20.238	1.00	18.40
ATOM	2365	N	TYR	A	480	54.527	15.401	18.781	1.00	7.82
ATOM	2366	CA	TYR	A	480	55.531	15.698	19.797	1.00	13.12
ATOM	2367	CB	TYR	A	480	56.579	16.660	19.248	1.00	22.29
ATOM	2368	CG	TYR	A	480	57.767	16.977	20.123	1.00	25.01
ATOM	2369	CD1	TYR	A	480	58.628	15.978	20.563	1.00	27.59
ATOM	2370	CE1	TYR	A	480	59.721	16.273	21.359	1.00	29.76
ATOM	2371	CD2	TYR	A	480	58.048	18.289	20.488	1.00	24.62
ATOM	2372	CE2	TYR	A	480	59.141	18.593	21.281	1.00	29.89
ATOM	2373	CZ	TYR	A	480	59.970	17.582	21.715	1.00	29.24
ATOM	2374	OH	TYR	A	480	61.056	17.876	22.505	1.00	31.83
ATOM	2375	C	TYR	A	480	54.877	16.241	21.061	1.00	10.21
ATOM	2376	O	TYR	A	480	54.787	15.523	22.065	1.00	2.83
ATOM	2377	N	PHE	A	481	54.330	17.455	21.002	1.00	7.09
ATOM	2378	CA	PHE	A	481	53.656	18.036	22.159	1.00	8.70
ATOM	2379	CB	PHE	A	481	52.852	19.280	21.803	1.00	17.24

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ATOM	2380	CG	PHE	A	481	53.553	20.453	21.194	1.00	20.65
ATOM	2381	CD1	PHE	A	481	54.929	20.585	21.206	1.00	23.15
ATOM	2382	CD2	PHE	A	481	52.812	21.479	20.618	1.00	22.68
ATOM	2383	CE1	PHE	A	481	55.554	21.678	20.640	1.00	19.51
ATOM	2384	CF2	PHE	A	481	53.425	22.580	20.055	1.00	22.16
ATOM	2385	C2	PHE	A	481	54.803	22.681	20.066	1.00	16.57
ATOM	2386	C	PHE	A	481	52.757	17.024	22.865	1.00	2.00
ATOM	2387	O	PHE	A	481	52.939	16.788	24.063	1.00	2.00
ATOM	2388	N	ILE	A	482	51.822	16.401	22.153	1.00	4.94
ATOM	2389	CA	ILE	A	482	50.928	15.406	22.734	1.00	8.72
ATOM	2390	CB	ILE	A	482	49.992	14.794	21.672	1.00	2.00
ATOM	2391	CG2	ILE	A	482	49.382	13.476	22.126	1.00	2.00
ATOM	2392	CG1	ILE	A	482	48.909	15.816	21.299	1.00	2.00
ATOM	2393	CD1	ILE	A	482	48.023	15.364	20.162	1.00	2.00
ATOM	2394	C	ILE	A	482	51.701	14.316	23.466	1.00	9.49
ATOM	2395	O	ILE	A	482	51.260	13.895	24.537	1.00	16.24
ATOM	2396	N	ASP	A	483	52.807	13.840	22.905	1.00	3.94
ATOM	2397	CA	ASP	A	483	53.589	12.794	23.543	1.00	9.76
ATOM	2398	CB	ASP	A	483	54.538	12.173	22.508	1.00	17.89
ATOM	2399	CG	ASP	A	483	55.177	10.903	23.037	1.00	31.19
ATOM	2400	OD1	ASP	A	483	54.535	10.199	23.847	1.00	35.74
ATOM	2401	OD2	ASP	A	483	56.327	10.613	22.648	1.00	40.47
ATOM	2402	C	ASP	A	483	54.381	13.301	24.744	1.00	13.29
ATOM	2403	O	ASP	A	483	54.256	12.796	25.862	1.00	10.59
ATOM	2404	N	LYS	A	484	55.204	14.320	24.510	1.00	10.91
ATOM	2405	CA	LYS	A	484	56.056	14.917	25.517	1.00	7.13
ATOM	2406	CB	LYS	A	484	56.934	16.013	24.883	1.00	14.32
ATOM	2407	CG	LYS	A	484	57.969	16.579	25.842	1.00	21.53
ATOM	2408	CD	LYS	A	484	58.995	17.451	25.135	1.00	26.03
ATOM	2409	CE	LYS	A	484	60.183	17.732	26.050	1.00	28.97
ATOM	2410	NZ	LYS	A	484	59.745	18.111	27.425	1.00	25.11
ATOM	2411	C	LYS	A	484	55.325	15.538	26.696	1.00	14.86
ATOM	2412	O	LYS	A	484	55.525	15.122	27.837	1.00	19.61
ATOM	2413	N	LEU	A	485	54.521	16.563	26.434	1.00	17.09
ATOM	2414	CA	LEU	A	485	53.794	17.277	27.471	1.00	10.52
ATOM	2415	CB	LEU	A	485	53.536	18.718	27.020	1.00	9.01
ATOM	2416	CG	LEU	A	485	54.709	19.576	26.571	1.00	9.80
ATOM	2417	CD1	LEU	A	485	54.231	20.518	25.470	1.00	10.07
ATOM	2418	CD2	LEU	A	485	55.302	20.349	27.741	1.00	10.43
ATOM	2419	C	LEU	A	485	52.442	16.656	27.803	1.00	12.06
ATOM	2420	O	LEU	A	485	51.805	17.036	28.797	1.00	11.02
ATOM	2421	N	ALA	A	486	51.971	15.745	26.958	1.00	8.45
ATOM	2422	CA	ALA	A	486	50.664	15.130	27.186	1.00	12.57
ATOM	2423	CB	ALA	A	486	50.608	14.446	28.542	1.00	5.79
ATOM	2424	C	ALA	A	486	49.546	16.161	27.042	1.00	11.00
ATOM	2425	O	ALA	A	486	48.734	16.319	27.956	1.00	9.23
ATOM	2426	N	LEU	A	487	49.499	16.852	25.901	1.00	2.00
ATOM	2427	CA	LEU	A	487	48.443	17.819	25.645	1.00	3.90
ATOM	2428	CB	LEU	A	487	48.841	18.933	24.690	1.00	2.00
ATOM	2429	CG	LEU	A	487	49.785	20.049	25.084	1.00	2.00
ATOM	2430	CD1	LEU	A	487	49.662	21.218	24.112	1.00	2.00
ATOM	2431	CD2	LEU	A	487	49.541	20.545	26.497	1.00	2.00
ATOM	2432	C	LEU	A	487	47.213	17.120	25.047	1.00	5.93
ATOM	2433	O	LEU	A	487	47.322	16.120	24.338	1.00	8.85
ATOM	2434	N	ARG	A	488	46.037	17.680	25.301	1.00	2.00
ATOM	2435	CA	ARG	A	488	44.799	17.132	24.763	1.00	2.00
ATOM	2436	CB	ARG	A	488	43.580	17.750	25.444	1.00	2.00
ATOM	2437	CG	ARG	A	488	43.544	17.642	26.954	1.00	2.00
ATOM	2438	CD	ARG	A	488	42.146	17.855	27.515	1.00	6.74
ATOM	2439	NE	ARG	A	488	42.089	17.509	28.932	1.00	20.63
ATOM	2440	CZ	ARG	A	488	42.523	18.246	29.945	1.00	23.68
ATOM	2441	NH1	ARG	A	488	43.066	19.440	29.736	1.00	21.73
ATOM	2442	NH2	ARG	A	488	42.410	17.808	31.195	1.00	24.81



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ATOM	2443	C	ARG	A	488	44.715	17.414	23.267	1.00	2.00
ATOM	2444	O	ARG	A	488	45.271	18.411	22.806	1.00	12.09
ATOM	2445	N	ALA	A	489	43.974	16.601	22.529	1.00	3.98
ATOM	2446	CA	ALA	A	489	43.804	16.772	21.089	1.00	2.89
ATOM	2447	CB	ALA	A	489	43.373	15.438	20.492	1.00	2.00
ATOM	2448	C	ALA	A	489	42.749	17.825	20.769	1.00	9.97
ATOM	2449	O	ALA	A	489	41.666	17.535	20.244	1.00	13.73
ATOM	2450	N	GLY	A	490	43.043	19.080	21.071	1.00	2.00
ATOM	2451	CA	GLY	A	490	42.149	20.198	20.909	1.00	2.00
ATOM	2452	C	GLY	A	490	41.182	20.076	19.754	1.00	2.00
ATOM	2453	O	GLY	A	490	41.597	20.364	18.624	1.00	2.00
ATOM	2454	N	ASN	A	491	39.938	19.681	20.005	1.00	11.05
ATOM	2455	CA	ASN	A	491	38.955	19.611	18.918	1.00	16.14
ATOM	2456	CB	ASN	A	491	37.851	18.597	19.164	1.00	12.56
ATOM	2457	CG	ASN	A	491	38.242	17.189	18.764	1.00	12.96
ATOM	2458	OD1	ASN	A	491	38.145	16.833	17.593	1.00	6.28
ATOM	2459	ND2	ASN	A	491	38.672	16.397	19.736	1.00	17.28
ATOM	2460	C	ASN	A	491	38.356	21.010	18.755	1.00	15.74
ATOM	2461	O	ASN	A	491	38.198	21.710	19.764	1.00	22.66
ATOM	2462	N	GLU	A	492	38.086	21.411	17.522	1.00	8.41
ATOM	2463	CA	GLU	A	492	37.532	22.748	17.301	1.00	8.47
ATOM	2464	CB	GLU	A	492	37.494	23.069	15.811	1.00	15.54
ATOM	2465	CG	GLU	A	492	37.010	21.952	14.905	1.00	19.87
ATOM	2466	CD	GLU	A	492	38.123	21.042	14.420	1.00	21.96
ATOM	2467	OE1	GLU	A	492	37.991	19.804	14.519	1.00	26.35
ATOM	2468	OE2	GLU	A	492	39.133	21.595	13.935	1.00	17.80
ATOM	2469	C	GLU	A	492	36.146	22.875	17.922	1.00	13.93
ATOM	2470	O	GLU	A	492	35.413	21.883	17.971	1.00	17.33
ATOM	2471	N	LYS	A	493	35.786	24.061	18.407	1.00	12.23
ATOM	2472	CA	LYS	A	493	34.472	24.267	19.012	1.00	12.80
ATOM	2473	CB	LYS	A	493	34.504	24.211	20.538	1.00	11.85
ATOM	2474	CG	LYS	A	493	35.264	25.314	21.242	1.00	4.09
ATOM	2475	CD	LYS	A	493	36.538	24.810	21.887	1.00	2.52
ATOM	2476	CE	LYS	A	493	36.250	24.295	23.289	1.00	6.97
ATOM	2477	NZ	LYS	A	493	35.732	25.391	24.161	1.00	2.00
ATOM	2478	C	LYS	A	493	33.837	25.575	18.539	1.00	12.71
ATOM	2479	O	LYS	A	493	34.527	26.510	18.131	1.00	5.98
ATOM	2480	N	GLU	A	494	32.514	25.661	18.628	1.00	14.57
ATOM	2481	CA	GLU	A	494	31.739	26.794	18.157	1.00	10.57
ATOM	2482	CB	GLU	A	494	30.255	26.410	18.110	1.00	14.56
ATOM	2483	CG	GLU	A	494	29.935	25.171	17.297	1.00	23.83
ATOM	2484	CD	GLU	A	494	28.457	24.822	17.330	1.00	33.12
ATOM	2485	OE1	GLU	A	494	27.620	25.714	17.595	1.00	33.07
ATOM	2486	OE2	GLU	A	494	28.108	23.646	17.089	1.00	39.75
ATOM	2487	C	GLU	A	494	31.865	28.082	18.954	1.00	10.81
ATOM	2488	O	GLU	A	494	31.376	28.211	20.076	1.00	13.19
ATOM	2489	N	GLU	A	495	32.479	29.083	18.326	1.00	15.25
ATOM	2490	CA	GLU	A	495	32.668	30.380	18.968	1.00	25.58
ATOM	2491	CB	GLU	A	495	33.371	31.360	18.029	1.00	27.35
ATOM	2492	CG	GLU	A	495	32.673	31.541	16.690	1.00	34.56
ATOM	2493	CD	GLU	A	495	33.313	32.610	15.825	1.00	42.70
ATOM	2494	OE1	GLU	A	495	33.268	33.803	16.196	1.00	45.43
ATOM	2495	OE2	GLU	A	495	33.863	32.250	14.761	1.00	44.19
ATOM	2496	C	GLU	A	495	31.328	30.941	19.424	1.00	30.36
ATOM	2497	O	GLU	A	495	30.317	30.818	18.734	1.00	31.00
ATOM	2498	N	GLY	A	496	31.301	31.515	20.623	1.00	38.14
ATOM	2499	CA	GLY	A	496	30.087	32.107	21.160	1.00	36.83
ATOM	2500	C	GLY	A	496	29.137	31.136	21.828	1.00	33.47
ATOM	2501	O	GLY	A	496	28.094	31.573	22.328	1.00	30.70
ATOM	2502	N	GLU	A	497	29.475	29.855	21.924	1.00	33.14
ATOM	2503	CA	GLU	A	497	28.621	28.867	22.565	1.00	29.14
ATOM	2504	CB	GLU	A	497	28.217	27.771	21.579	1.00	31.33
ATOM	2505	CG	GLU	A	497	27.575	28.241	20.287	1.00	40.52

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ATOM	2506	CD	GLU	A	497	26.204	28.862	20.469	1.00	45.30
ATOM	2507	OE1	GLU	A	497	25.222	28.089	20.556	1.00	45.41
ATOM	2508	OE2	GLU	A	497	26.100	30.108	20.530	1.00	43.52
ATOM	2509	C	GLU	A	497	29.304	28.228	23.771	1.00	30.21
ATOM	2510	O	GLU	A	497	28.644	27.702	24.671	1.00	32.77
ATOM	2511	N	THR	A	498	30.633	28.262	23.794	1.00	23.04
ATOM	2512	CA	THR	A	498	31.394	27.654	24.880	1.00	20.26
ATOM	2513	CB	THR	A	498	31.915	26.268	24.443	1.00	22.36
ATOM	2514	OG1	THR	A	498	31.817	26.162	23.013	1.00	30.34
ATOM	2515	CG2	THR	A	498	31.123	25.155	25.099	1.00	22.45
ATOM	2516	C	THR	A	498	32.576	28.496	25.325	1.00	22.01
ATOM	2517	O	THR	A	498	33.056	29.346	24.571	1.00	28.47
ATOM	2518	N	ALA	A	499	33.062	28.269	26.547	1.00	22.10
ATOM	2519	CA	ALA	A	499	34.216	29.034	27.032	1.00	16.32
ATOM	2520	CB	ALA	A	499	34.641	28.538	28.403	1.00	15.49
ATOM	2521	C	ALA	A	499	35.371	28.919	26.042	1.00	10.29
ATOM	2522	O	ALA	A	499	35.478	27.929	25.315	1.00	2.00
ATOM	2523	N	ASP	A	500	36.242	29.920	25.997	1.00	18.46
ATOM	2524	CA	ASP	A	500	37.390	29.897	25.092	1.00	15.85
ATOM	2525	CB	ASP	A	500	37.915	31.308	24.802	1.00	12.55
ATOM	2526	CG	ASP	A	500	39.013	31.309	23.752	1.00	12.52
ATOM	2527	OD1	ASP	A	500	39.426	30.212	23.319	1.00	10.20
ATOM	2528	OD2	ASP	A	500	39.460	32.410	23.353	1.00	10.44
ATOM	2529	C	ASP	A	500	38.543	29.069	25.651	1.00	13.50
ATOM	2530	O	ASP	A	500	39.324	29.558	26.473	1.00	16.94
ATOM	2531	N	THR	A	501	38.665	27.820	25.217	1.00	2.00
ATOM	2532	CA	THR	A	501	39.720	26.933	25.675	1.00	8.39
ATOM	2533	CB	THR	A	501	39.324	25.906	26.752	1.00	6.18
ATOM	2534	OG1	THR	A	501	38.149	25.213	26.309	1.00	13.40
ATOM	2535	CG2	THR	A	501	39.113	26.547	28.108	1.00	7.73
ATOM	2536	C	THR	A	501	40.248	26.107	24.501	1.00	6.29
ATOM	2537	O	THR	A	501	39.470	25.625	23.682	1.00	10.78
ATOM	2538	N	VAL	A	502	41.567	25.931	24.470	1.00	2.00
ATOM	2539	CA	VAL	A	502	42.205	25.176	23.398	1.00	2.00
ATOM	2540	CB	VAL	A	502	43.179	26.103	22.638	1.00	2.00
ATOM	2541	CG1	VAL	A	502	42.428	27.132	21.809	1.00	2.00
ATOM	2542	CG2	VAL	A	502	44.101	26.801	23.629	1.00	6.92
ATOM	2543	C	VAL	A	502	42.973	23.945	23.863	1.00	2.00
ATOM	2544	O	VAL	A	502	43.326	23.810	25.036	1.00	16.73
ATOM	2545	N	GLY	A	503	43.267	23.045	22.929	1.00	6.36
ATOM	2546	CA	GLY	A	503	44.025	21.827	23.187	1.00	13.52
ATOM	2547	C	GLY	A	503	45.383	21.838	22.488	1.00	18.70
ATOM	2548	O	GLY	A	503	46.139	22.802	22.665	1.00	20.92
ATOM	2549	N	CYS	A	504	45.716	20.808	21.707	1.00	17.45
ATOM	2550	CA	CYS	A	504	47.007	20.792	21.022	1.00	18.05
ATOM	2551	CB	CYS	A	504	47.736	19.456	21.165	1.00	22.11
ATOM	2552	SG	CYS	A	504	49.541	19.628	21.054	1.00	36.77
ATOM	2553	C	CYS	A	504	46.909	21.177	19.552	1.00	20.53
ATOM	2554	O	CYS	A	504	47.690	22.042	19.128	1.00	25.35
ATOM	2555	N	CYS	A	505	45.977	20.626	18.771	1.00	2.00
ATOM	2556	CA	CYS	A	505	45.834	21.023	17.379	1.00	6.81
ATOM	2557	CB	CYS	A	505	45.235	19.904	16.531	1.00	2.00
ATOM	2558	SG	CYS	A	505	45.701	18.232	17.011	1.00	18.48
ATOM	2559	C	CYS	A	505	44.966	22.271	17.231	1.00	11.50
ATOM	2560	O	CYS	A	505	44.713	22.693	16.099	1.00	14.39
ATOM	2561	N	SER	A	506	44.488	22.846	18.329	1.00	19.05
ATOM	2562	CA	SER	A	506	43.651	24.034	18.274	1.00	24.02
ATOM	2563	CB	SER	A	506	42.340	23.821	19.034	1.00	20.14
ATOM	2564	OG	SER	A	506	42.566	24.041	20.418	1.00	23.02
ATOM	2565	C	SER	A	506	44.383	25.237	18.869	1.00	24.45
ATOM	2566	O	SER	A	506	43.763	26.264	19.148	1.00	21.97
ATOM	2567	N	LEU	A	507	45.687	25.070	19.086	1.00	23.21
ATOM	2568	CA	LEU	A	507	46.478	26.179	19.620	1.00	19.43

ATOM	2569	CB	LEU A 507	47.905	25.752	19.944	1.00	12.67
ATOM	2570	CG	LEU A 507	48.199	25.004	21.235	1.00	13.25
ATOM	2571	CD1	LEU A 507	49.469	24.172	21.109	1.00	17.21
ATOM	2572	CD2	LEU A 507	48.358	25.972	22.401	1.00	13.11
ATOM	2573	C	LEU A 507	46.508	27.253	18.567	1.00	16.45
ATOM	2574	O	LEU A 507	46.545	27.011	17.366	1.00	9.50
ATOM	2575	N	ARG A 508	46.481	28.537	19.027	1.00	12.59
ATOM	2576	CA	ARG A 508	46.581	29.665	18.103	1.00	13.06
ATOM	2577	CB	ARG A 508	45.499	30.703	18.328	1.00	16.36
ATOM	2578	CG	ARG A 508	44.131	30.178	18.718	1.00	14.63
ATOM	2579	CD	ARG A 508	43.090	31.277	18.546	1.00	19.79
ATOM	2580	NE	ARG A 508	41.793	30.897	19.088	1.00	24.22
ATOM	2581	CZ	ARG A 508	41.488	30.918	20.382	1.00	29.91
ATOM	2582	NH1	ARG A 508	42.368	31.310	21.295	1.00	29.69
ATOM	2583	NH2	ARG A 508	40.273	30.546	20.768	1.00	28.98
ATOM	2584	C	ARG A 508	47.951	30.313	18.299	1.00	14.75
ATOM	2585	O	ARG A 508	48.570	30.124	19.353	1.00	14.97
ATOM	2586	N	VAL A 509	48.370	31.153	17.359	1.00	12.76
ATOM	2587	CA	VAL A 509	49.669	31.812	17.456	1.00	14.67
ATOM	2588	CB	VAL A 509	49.877	32.831	16.320	1.00	13.76
ATOM	2589	CG1	VAL A 509	51.307	33.351	16.334	1.00	20.51
ATOM	2590	CG2	VAL A 509	49.568	32.206	14.967	1.00	15.84
ATOM	2591	C	VAL A 509	49.929	32.496	18.789	1.00	12.46
ATOM	2592	O	VAL A 509	51.045	32.438	19.324	1.00	16.38
ATOM	2593	N	GLU A 510	48.927	33.118	19.389	1.00	2.00
ATOM	2594	CA	GLU A 510	49.016	33.829	20.644	1.00	13.20
ATOM	2595	CB	GLU A 510	47.724	34.665	20.793	1.00	19.05
ATOM	2596	CG	GLU A 510	46.480	33.805	20.928	1.00	24.85
ATOM	2597	CD	GLU A 510	45.180	34.559	20.743	1.00	28.03
ATOM	2598	OE1	GLU A 510	45.078	35.743	21.126	1.00	29.53
ATOM	2599	OE2	GLU A 510	44.227	33.952	20.202	1.00	26.17
ATOM	2600	C	GLU A 510	49.182	33.000	21.905	1.00	14.94
ATOM	2601	O	GLU A 510	49.254	33.577	23.001	1.00	15.95
ATOM	2602	N	HIS A 511	49.209	31.678	21.810	1.00	19.07
ATOM	2603	CA	HIS A 511	49.353	30.819	22.974	1.00	13.45
ATOM	2604	CB	HIS A 511	48.474	29.573	22.822	1.00	15.55
ATOM	2605	CG	HIS A 511	47.009	29.874	22.938	1.00	16.45
ATOM	2606	CD2	HIS A 511	46.316	30.537	23.897	1.00	14.41
ATOM	2607	ND1	HIS A 511	46.092	29.493	21.985	1.00	17.23
ATOM	2608	CE1	HIS A 511	44.893	29.898	22.360	1.00	19.17
ATOM	2609	NE2	HIS A 511	45.000	30.527	23.519	1.00	20.18
ATOM	2610	C	HIS A 511	50.796	30.420	23.239	1.00	11.24
ATOM	2611	O	HIS A 511	51.070	29.868	24.310	1.00	19.71
ATOM	2612	N	ILE A 512	51.702	30.680	22.300	1.00	2.00
ATOM	2613	CA	ILE A 512	53.107	30.352	22.492	1.00	11.10
ATOM	2614	CB	ILE A 512	53.613	29.161	21.648	1.00	9.10
ATOM	2615	CG2	ILE A 512	53.509	27.879	22.451	1.00	12.82
ATOM	2616	CG1	ILE A 512	52.869	29.077	20.319	1.00	16.40
ATOM	2617	CD1	ILE A 512	53.220	27.909	19.426	1.00	15.12
ATOM	2618	C	ILE A 512	54.041	31.520	22.188	1.00	12.87
ATOM	2619	O	ILE A 512	53.821	32.328	21.288	1.00	19.80
ATOM	2620	N	ASN A 513	55.117	31.592	22.965	1.00	11.85
ATOM	2621	CA	ASN A 513	56.138	32.619	22.781	1.00	20.24
ATOM	2622	CB	ASN A 513	56.167	33.608	23.944	1.00	24.40
ATOM	2623	CG	ASN A 513	54.976	34.549	23.937	1.00	25.86
ATOM	2624	OD1	ASN A 513	54.575	35.013	22.865	1.00	21.21
ATOM	2625	ND2	ASN A 513	54.411	34.808	25.109	1.00	27.00
ATOM	2626	C	ASN A 513	57.504	31.949	22.619	1.00	23.42
ATOM	2627	O	ASN A 513	58.010	31.315	23.547	1.00	27.74
ATOM	2628	N	LEU A 514	58.084	32.067	21.432	1.00	19.39
ATOM	2629	CA	LEU A 514	59.374	31.460	21.156	1.00	21.25
ATOM	2630	CB	LEU A 514	59.560	31.315	19.644	1.00	17.19
ATOM	2631	CG	LEU A 514	58.560	30.423	18.913	1.00	15.98

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ATOM	2632	CD1	LEU	A	514	58.909	30.364	17.430	1.00	21.09
ATOM	2633	CD2	LEU	A	514	58.530	29.016	19.488	1.00	10.35
ATOM	2634	C	LEU	A	514	60.544	32.250	21.729	1.00	30.02
ATOM	2635	O	LEU	A	514	60.659	33.465	21.561	1.00	36.99
ATOM	2636	N	HIS	A	515	61.421	31.543	22.435	1.00	27.51
ATOM	2637	CA	HIS	A	515	62.624	32.117	23.007	1.00	22.49
ATOM	2638	CB	HIS	A	515	62.589	32.230	24.531	1.00	23.33
ATOM	2639	CG	HIS	A	515	61.603	33.230	25.051	1.00	29.06
ATOM	2640	CD2	HIS	A	515	61.369	34.510	24.664	1.00	25.25
ATOM	2641	ND1	HIS	A	515	60.711	32.957	26.062	1.00	29.48
ATOM	2642	CE1	HIS	A	515	59.972	34.028	26.290	1.00	28.63
ATOM	2643	NE2	HIS	A	515	60.351	34.982	25.455	1.00	28.84
ATOM	2644	C	HIS	A	515	63.790	31.210	22.641	1.00	25.03
ATOM	2645	O	HIS	A	515	63.871	30.084	23.134	1.00	23.07
ATOM	2646	N	PRO	A	516	64.705	31.708	21.819	1.00	23.74
ATOM	2647	CD	PRO	A	516	64.676	33.042	21.173	1.00	21.90
ATOM	2648	CA	PRO	A	516	65.890	30.955	21.425	1.00	19.08
ATOM	2649	CB	PRO	A	516	66.606	31.858	20.440	1.00	18.53
ATOM	2650	CG	PRO	A	516	65.563	32.815	19.964	1.00	16.74
ATOM	2651	C	PRO	A	516	66.687	30.532	22.647	1.00	18.46
ATOM	2652	O	PRO	A	516	67.317	29.471	22.618	1.00	16.28
ATOM	2653	N	GLU	A	517	66.643	31.283	23.746	1.00	20.34
ATOM	2654	CA	GLU	A	517	67.310	30.891	24.984	1.00	25.78
ATOM	2655	CB	GLU	A	517	68.800	30.969	24.736	1.00	30.58
ATOM	2656	CG	GLU	A	517	69.682	31.026	25.974	1.00	38.87
ATOM	2657	CD	GLU	A	517	71.026	31.546	25.489	1.00	48.81
ATOM	2658	OE1	GLU	A	517	72.067	30.972	25.849	1.00	55.92
ATOM	2659	OE2	GLU	A	517	71.005	32.539	24.726	1.00	51.87
ATOM	2660	C	GLU	A	517	66.833	31.708	26.178	1.00	22.30
ATOM	2661	O	GLU	A	517	66.950	32.933	26.225	1.00	18.97
ATOM	2662	N	LEU	A	518	66.297	31.000	27.169	1.00	17.29
ATOM	2663	CA	LEU	A	518	65.693	31.640	28.347	1.00	30.88
ATOM	2664	CB	LEU	A	518	64.185	31.618	28.090	1.00	28.22
ATOM	2665	CG	LEU	A	518	63.230	32.459	28.918	1.00	23.04
ATOM	2666	CD1	LEU	A	518	63.038	31.869	30.309	1.00	21.98
ATOM	2667	CD2	LEU	A	518	63.690	33.909	29.021	1.00	25.41
ATOM	2668	C	LEU	A	518	66.061	30.925	29.629	1.00	38.81
ATOM	2669	O	LEU	A	518	66.029	29.687	29.685	1.00	40.99
ATOM	2670	N	ASP	A	519	66.559	31.666	30.632	1.00	41.39
ATOM	2671	CA	ASP	A	519	67.086	31.019	31.844	1.00	40.39
ATOM	2672	CB	ASP	A	519	66.025	30.250	32.617	1.00	42.19
ATOM	2673	CG	ASP	A	519	65.149	31.138	33.478	1.00	45.25
ATOM	2674	OD1	ASP	A	519	65.700	32.133	34.001	1.00	42.60
ATOM	2675	OD2	ASP	A	519	63.943	30.852	33.630	1.00	50.66
ATOM	2676	C	ASP	A	519	68.167	30.076	31.318	1.00	36.45
ATOM	2677	O	ASP	A	519	68.250	28.892	31.634	1.00	32.96
ATOM	2678	N	GLY	A	520	68.946	30.555	30.350	1.00	33.97
ATOM	2679	CA	GLY	A	520	69.927	29.883	29.570	1.00	39.94
ATOM	2680	C	GLY	A	520	69.560	28.646	28.773	1.00	41.12
ATOM	2681	O	GLY	A	520	70.404	28.135	28.024	1.00	42.06
ATOM	2682	N	GLN	A	521	68.399	28.051	28.997	1.00	36.36
ATOM	2683	CA	GLN	A	521	67.965	26.836	28.333	1.00	27.65
ATOM	2684	CB	GLN	A	521	66.690	26.302	28.972	1.00	37.02
ATOM	2685	CG	GLN	A	521	66.761	26.158	30.486	1.00	42.31
ATOM	2686	CD	GLN	A	521	65.377	26.095	31.110	1.00	45.90
ATOM	2687	OE1	GLN	A	521	64.756	27.128	31.373	1.00	47.33
ATOM	2688	NE2	GLN	A	521	64.887	24.882	31.346	1.00	40.03
ATOM	2689	C	GLN	A	521	67.774	27.147	26.853	1.00	22.72
ATOM	2690	O	GLN	A	521	67.193	28.174	26.507	1.00	19.04
ATOM	2691	N	GLU	A	522	68.299	26.267	26.016	1.00	19.97
ATOM	2692	CA	GLU	A	522	68.301	26.451	24.577	1.00	20.02
ATOM	2693	CB	GLU	A	522	69.455	25.678	23.927	1.00	25.09
ATOM	2694	CG	GLU	A	522	70.703	25.440	24.744	1.00	28.56

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ATOM	2695	CD	GLU	A	522	70.607	24.273	25.710	1.00	31.49
ATOM	2696	OE1	GLU	A	522	69.627	23.502	25.623	1.00	32.97
ATOM	2697	OE2	GLU	A	522	71.526	24.159	26.551	1.00	32.44
ATOM	2698	C	GLU	A	522	67.018	26.031	23.872	1.00	17.27
ATOM	2699	O	GLU	A	522	66.623	24.866	23.858	1.00	18.14
ATOM	2700	N	TYR	A	523	66.406	26.985	23.180	1.00	18.13
ATOM	2701	CA	TYR	A	523	65.179	26.738	22.433	1.00	19.98
ATOM	2702	CB	TYR	A	523	65.344	25.616	21.421	1.00	21.11
ATOM	2703	CG	TYR	A	523	66.286	25.815	20.262	1.00	26.54
ATOM	2704	CD1	TYR	A	523	67.203	24.824	19.925	1.00	25.92
ATOM	2705	CE1	TYR	A	523	68.073	24.985	18.864	1.00	29.38
ATOM	2706	CD2	TYR	A	523	66.274	26.971	19.494	1.00	29.03
ATOM	2707	CE2	TYR	A	523	67.140	27.139	18.429	1.00	30.55
ATOM	2708	CZ	TYR	A	523	68.037	26.141	18.116	1.00	30.60
ATOM	2709	OH	TYR	A	523	68.902	26.313	17.059	1.00	29.01
ATOM	2710	C	TYR	A	523	64.044	26.415	23.404	1.00	24.45
ATOM	2711	O	TYR	A	523	63.633	25.261	23.545	1.00	31.61
ATOM	2712	N	VAL	A	524	63.544	27.439	24.094	1.00	18.12
ATOM	2713	CA	VAL	A	524	62.465	27.250	25.053	1.00	11.81
ATOM	2714	CB	VAL	A	524	62.777	27.878	26.424	1.00	6.95
ATOM	2715	CG1	VAL	A	524	61.603	27.702	27.381	1.00	2.00
ATOM	2716	CG2	VAL	A	524	64.037	27.265	27.014	1.00	2.00
ATOM	2717	C	VAL	A	524	61.148	27.830	24.542	1.00	12.34
ATOM	2718	O	VAL	A	524	61.074	29.017	24.229	1.00	11.63
ATOM	2719	N	VAL	A	525	60.126	26.981	24.506	1.00	13.65
ATOM	2720	CA	VAL	A	525	58.802	27.411	24.065	1.00	15.56
ATOM	2721	CB	VAL	A	525	58.119	26.410	23.124	1.00	13.56
ATOM	2722	CG1	VAL	A	525	56.886	27.053	22.502	1.00	11.80
ATOM	2723	CG2	VAL	A	525	59.064	25.935	22.030	1.00	14.71
ATOM	2724	C	VAL	A	525	57.920	27.671	25.286	1.00	18.93
ATOM	2725	O	VAL	A	525	57.775	26.824	26.168	1.00	20.95
ATOM	2726	N	GLU	A	526	57.350	28.871	25.343	1.00	19.50
ATOM	2727	CA	GLU	A	526	56.500	29.263	26.460	1.00	21.23
ATOM	2728	CB	GLU	A	526	56.817	30.703	26.868	1.00	24.53
ATOM	2729	CG	GLU	A	526	56.296	31.094	28.240	1.00	22.38
ATOM	2730	CD	GLU	A	526	56.643	32.519	28.628	1.00	21.48
ATOM	2731	OE1	GLU	A	526	55.854	33.112	29.395	1.00	15.02
ATOM	2732	OE2	GLU	A	526	57.683	33.052	28.184	1.00	23.55
ATOM	2733	C	GLU	A	526	55.015	29.117	26.137	1.00	26.06
ATOM	2734	O	GLU	A	526	54.392	29.934	25.457	1.00	21.96
ATOM	2735	N	PHE	A	527	54.437	28.036	26.654	1.00	25.98
ATOM	2736	CA	PHE	A	527	53.031	27.713	26.498	1.00	23.73
ATOM	2737	CB	PHE	A	527	52.781	26.204	26.589	1.00	19.73
ATOM	2738	CG	PHE	A	527	53.277	25.345	25.469	1.00	12.25
ATOM	2739	CD1	PHE	A	527	54.418	24.570	25.601	1.00	2.00
ATOM	2740	CD2	PHE	A	527	52.582	25.287	24.271	1.00	16.12
ATOM	2741	CE1	PHE	A	527	54.862	23.778	24.562	1.00	6.82
ATOM	2742	CE2	PHE	A	527	53.025	24.498	23.223	1.00	16.98
ATOM	2743	CZ	PHE	A	527	54.169	23.735	23.365	1.00	10.42
ATOM	2744	C	PHE	A	527	52.181	28.365	27.595	1.00	22.60
ATOM	2745	O	PHE	A	527	52.326	28.026	28.774	1.00	14.46
ATOM	2746	N	ASP	A	528	51.279	29.250	27.190	1.00	20.47
ATOM	2747	CA	ASP	A	528	50.383	29.901	28.145	1.00	24.17
ATOM	2748	CB	ASP	A	528	50.880	31.299	28.493	1.00	23.35
ATOM	2749	CG	ASP	A	528	50.194	31.892	29.707	1.00	31.06
ATOM	2750	OD1	ASP	A	528	49.206	31.305	30.198	1.00	33.77
ATOM	2751	OD2	ASP	A	528	50.655	32.957	30.175	1.00	33.22
ATOM	2752	C	ASP	A	528	48.972	29.960	27.563	1.00	27.86
ATOM	2753	O	ASP	A	528	48.739	30.692	26.598	1.00	37.36
ATOM	2754	N	PHE	A	529	48.054	29.168	28.113	1.00	22.51
ATOM	2755	CA	PHE	A	529	46.686	29.147	27.600	1.00	18.67
ATOM	2756	CB	PHE	A	529	46.614	28.393	26.278	1.00	12.32
ATOM	2757	CG	PHE	A	529	47.045	26.961	26.266	1.00	10.36

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ATOM	2758	CD1	PHE	A	529	46.141	25.953	26.559	1.00	11.56
ATOM	2759	CD2	PHE	A	529	48.345	26.606	25.944	1.00	2.00
ATOM	2760	CE1	PHE	A	529	46.519	24.622	26.545	1.00	11.76
ATOM	2761	CE2	PHE	A	529	48.731	25.279	25.930	1.00	12.28
ATOM	2762	CZ	PHE	A	529	47.819	24.285	26.231	1.00	11.04
ATOM	2763	C	PHE	A	529	45.692	28.559	28.595	1.00	17.07
ATOM	2764	O	PHE	A	529	46.048	28.207	29.721	1.00	24.78
ATOM	2765	N	LEU	A	530	44.431	28.475	28.178	1.00	8.64
ATOM	2766	CA	LEU	A	530	43.385	27.933	29.048	1.00	6.79
ATOM	2767	CB	LEU	A	530	42.256	28.958	29.173	1.00	11.43
ATOM	2768	CG	LEU	A	530	42.600	30.217	29.979	1.00	6.04
ATOM	2769	CD1	LEU	A	530	41.576	31.319	29.783	1.00	2.00
ATOM	2770	CD2	LEU	A	530	42.715	29.876	31.460	1.00	2.00
ATOM	2771	C	LEU	A	530	42.889	26.592	28.526	1.00	9.94
ATOM	2772	O	LEU	A	530	42.320	26.490	27.435	1.00	12.98
ATOM	2773	N	GLY	A	531	43.176	25.538	29.281	1.00	2.00
ATOM	2774	CA	GLY	A	531	42.781	24.188	28.870	1.00	2.00
ATOM	2775	C	GLY	A	531	41.420	23.813	29.444	1.00	8.93
ATOM	2776	O	GLY	A	531	40.720	24.668	29.990	1.00	13.58
ATOM	2777	N	LYS	A	532	41.040	22.545	29.332	1.00	7.97
ATOM	2778	CA	LYS	A	532	39.766	22.065	29.837	1.00	6.39
ATOM	2779	CB	LYS	A	532	39.793	20.551	30.077	1.00	10.23
ATOM	2780	CG	LYS	A	532	38.487	20.011	30.655	1.00	2.00
ATOM	2781	CD	LYS	A	532	38.579	18.500	30.793	1.00	2.00
ATOM	2782	CE	LYS	A	532	37.212	17.873	30.988	1.00	2.00
ATOM	2783	NZ	LYS	A	532	37.253	16.423	30.633	1.00	11.91
ATOM	2784	C	LYS	A	532	39.377	22.724	31.150	1.00	16.61
ATOM	2785	O	LYS	A	532	40.207	22.947	32.036	1.00	25.30
ATOM	2786	N	ASP	A	533	38.094	23.060	31.292	1.00	15.55
ATOM	2787	CA	ASP	A	533	37.596	23.708	32.501	1.00	13.72
ATOM	2788	CB	ASP	A	533	37.838	22.800	33.717	1.00	15.39
ATOM	2789	CG	ASP	A	533	37.057	21.506	33.668	1.00	28.58
ATOM	2790	OD1	ASP	A	533	35.978	21.510	33.039	1.00	34.76
ATOM	2791	OD2	ASP	A	533	37.513	20.491	34.234	1.00	36.12
ATOM	2792	C	ASP	A	533	38.267	25.047	32.764	1.00	12.80
ATOM	2793	O	ASP	A	533	38.414	25.447	33.928	1.00	10.50
ATOM	2794	N	SER	A	534	38.764	25.746	31.748	1.00	7.72
ATOM	2795	CA	SER	A	534	39.476	26.997	31.932	1.00	13.75
ATOM	2796	CB	SER	A	534	38.520	28.100	32.400	1.00	8.21
ATOM	2797	OG	SER	A	534	37.557	28.385	31.405	1.00	6.24
ATOM	2798	C	SER	A	534	40.659	26.908	32.894	1.00	18.19
ATOM	2799	O	SER	A	534	41.010	27.913	33.528	1.00	17.42
ATOM	2800	N	ILE	A	535	41.321	25.759	33.008	1.00	18.16
ATOM	2801	CA	ILE	A	535	42.486	25.646	33.880	1.00	11.73
ATOM	2802	CB	ILE	A	535	42.638	24.270	34.524	1.00	12.00
ATOM	2803	CG2	ILE	A	535	44.053	24.027	35.025	1.00	15.19
ATOM	2804	CG1	ILE	A	535	41.638	24.137	35.685	1.00	2.00
ATOM	2805	CD1	ILE	A	535	41.411	22.703	36.107	1.00	2.00
ATOM	2806	C	ILE	A	535	43.701	26.024	33.035	1.00	15.61
ATOM	2807	O	ILE	A	535	43.947	25.480	31.963	1.00	19.60
ATOM	2808	N	ARG	A	536	44.420	27.012	33.541	1.00	21.09
ATOM	2809	CA	ARG	A	536	45.604	27.545	32.888	1.00	17.83
ATOM	2810	CB	ARG	A	536	46.057	28.790	33.655	1.00	20.26
ATOM	2811	CG	ARG	A	536	47.247	29.513	33.051	1.00	22.36
ATOM	2812	CD	ARG	A	536	47.204	30.990	33.432	1.00	27.20
ATOM	2813	NE	ARG	A	536	48.366	31.706	32.927	1.00	33.38
ATOM	2814	CZ	ARG	A	536	49.494	31.915	33.593	1.00	40.30
ATOM	2815	NH1	ARG	A	536	49.645	31.479	34.838	1.00	40.14
ATOM	2816	NH2	ARG	A	536	50.466	32.587	32.983	1.00	41.07
ATOM	2817	C	ARG	A	536	46.747	26.544	32.792	1.00	11.43
ATOM	2818	O	ARG	A	536	47.074	25.819	33.729	1.00	8.17
ATOM	2819	N	TYR	A	537	47.360	26.534	31.614	1.00	12.37
ATOM	2820	CA	TYR	A	537	48.504	25.686	31.315	1.00	12.26

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ATOM	2821	CB	TYR	A	537	48.242	24.794	30.094	1.00	11.02
ATOM	2822	CG	TYR	A	537	49.399	23.861	29.785	1.00	7.83
ATOM	2823	CD1	TYR	A	537	50.350	24.201	28.834	1.00	4.58
ATOM	2824	CE1	TYR	A	537	51.408	23.357	28.555	1.00	7.00
ATOM	2825	CD2	TYR	A	537	49.536	22.651	30.453	1.00	2.00
ATOM	2826	CE2	TYR	A	537	50.591	21.803	30.176	1.00	9.27
ATOM	2827	CZ	TYR	A	537	51.525	22.160	29.226	1.00	9.70
ATOM	2828	OH	TYR	A	537	52.581	21.320	28.950	1.00	13.52
ATOM	2829	C	TYR	A	537	49.742	26.553	31.067	1.00	2.00
ATOM	2830	O	TYR	A	537	49.872	27.150	29.995	1.00	2.00
ATOM	2831	N	TYR	A	538	50.611	26.650	32.073	1.00	2.00
ATOM	2832	CA	TYR	A	538	51.828	27.445	31.919	1.00	9.03
ATOM	2833	CB	TYR	A	538	52.011	28.536	32.958	1.00	10.39
ATOM	2834	CG	TYR	A	538	53.086	29.550	32.633	1.00	18.10
ATOM	2835	CD1	TYR	A	538	52.816	30.673	31.860	1.00	21.55
ATOM	2836	CE1	TYR	A	538	53.796	31.606	31.579	1.00	22.38
ATOM	2837	CD2	TYR	A	538	54.376	29.400	33.119	1.00	24.53
ATOM	2838	CE2	TYR	A	538	55.365	30.325	32.845	1.00	24.56
ATOM	2839	CZ	TYR	A	538	55.070	31.427	32.073	1.00	24.34
ATOM	2840	OH	TYR	A	538	56.039	32.362	31.789	1.00	26.14
ATOM	2841	C	TYR	A	538	53.046	26.521	31.973	1.00	14.06
ATOM	2842	O	TYR	A	538	53.151	25.685	32.872	1.00	9.70
ATOM	2843	N	ASN	A	539	53.935	26.699	30.994	1.00	18.33
ATOM	2844	CA	ASN	A	539	55.108	25.830	30.960	1.00	19.80
ATOM	2845	CB	ASN	A	539	54.662	24.415	30.583	1.00	26.44
ATOM	2846	CG	ASN	A	539	55.569	23.315	31.081	1.00	31.10
ATOM	2847	OD1	ASN	A	539	56.465	23.542	31.894	1.00	35.31
ATOM	2848	ND2	ASN	A	539	55.335	22.097	30.599	1.00	33.30
ATOM	2849	C	ASN	A	539	56.164	26.323	29.985	1.00	24.16
ATOM	2850	O	ASN	A	539	55.911	26.599	28.814	1.00	28.53
ATOM	2851	N	LYS	A	540	57.373	26.458	30.524	1.00	22.76
ATOM	2852	CA	LYS	A	540	58.534	26.843	29.716	1.00	15.09
ATOM	2853	CB	LYS	A	540	59.453	27.797	30.477	1.00	9.32
ATOM	2854	CG	LYS	A	540	58.705	29.040	30.933	1.00	16.21
ATOM	2855	CD	LYS	A	540	59.526	30.101	31.617	1.00	15.07
ATOM	2856	CE	LYS	A	540	59.940	29.710	33.020	1.00	24.40
ATOM	2857	NZ	LYS	A	540	58.798	29.271	33.865	1.00	23.08
ATOM	2858	C	LYS	A	540	59.197	25.504	29.407	1.00	16.00
ATOM	2859	O	LYS	A	540	59.547	24.827	30.383	1.00	22.64
ATOM	2860	N	VAL	A	541	59.222	25.092	28.144	1.00	11.09
ATOM	2861	CA	VAL	A	541	59.817	23.776	27.892	1.00	15.85
ATOM	2862	CB	VAL	A	541	58.755	22.673	27.799	1.00	18.62
ATOM	2863	CG1	VAL	A	541	57.594	23.065	26.897	1.00	18.64
ATOM	2864	CG2	VAL	A	541	59.386	21.360	27.347	1.00	20.63
ATOM	2865	C	VAL	A	541	60.783	23.783	26.718	1.00	19.24
ATOM	2866	O	VAL	A	541	60.458	24.026	25.558	1.00	20.49
ATOM	2867	N	PRO	A	542	62.040	23.494	27.063	1.00	13.86
ATOM	2868	CD	PRO	A	542	62.499	23.160	28.438	1.00	13.72
ATOM	2869	CA	PRO	A	542	63.130	23.416	26.109	1.00	9.80
ATOM	2870	CB	PRO	A	542	64.347	23.115	26.970	1.00	14.03
ATOM	2871	CG	PRO	A	542	63.787	22.421	28.170	1.00	12.88
ATOM	2872	C	PRO	A	542	62.874	22.284	25.129	1.00	14.69
ATOM	2873	O	PRO	A	542	62.687	21.149	25.573	1.00	15.48
ATOM	2874	N	VAL	A	543	62.827	22.597	23.839	1.00	15.86
ATOM	2875	CA	VAL	A	543	62.558	21.586	22.825	1.00	19.26
ATOM	2876	CB	VAL	A	543	61.360	22.003	21.948	1.00	19.63
ATOM	2877	CG1	VAL	A	543	60.070	22.059	22.748	1.00	16.46
ATOM	2878	CG2	VAL	A	543	61.642	23.351	21.292	1.00	26.17
ATOM	2879	C	VAL	A	543	63.745	21.308	21.907	1.00	25.02
ATOM	2880	O	VAL	A	543	64.835	21.859	22.065	1.00	31.40
ATOM	2881	N	GLU	A	544	63.511	20.438	20.923	1.00	21.90
ATOM	2882	CA	GLU	A	544	64.542	20.085	19.955	1.00	23.87
ATOM	2883	CB	GLU	A	544	64.131	18.860	19.147	1.00	24.99

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ATOM	2884	CG	GLU	A	544	63.631	17.677	19.950	1.00	28.65
ATOM	2885	CD	GLU	A	544	64.689	17.050	20.834	1.00	37.01
ATOM	2886	OE1	GLU	A	544	65.388	16.139	20.336	1.00	37.81
ATOM	2887	OE2	GLU	A	544	64.794	17.479	22.005	1.00	43.96
ATOM	2888	C	GLU	A	544	64.779	21.271	19.022	1.00	28.49
ATOM	2889	O	GLU	A	544	63.892	22.119	18.899	1.00	29.37
ATOM	2890	N	LYS	A	545	65.937	21.316	18.371	1.00	29.97
ATOM	2891	CA	LYS	A	545	66.253	22.400	17.456	1.00	29.64
ATOM	2892	CB	LYS	A	545	67.659	22.257	16.847	1.00	34.98
ATOM	2893	CG	LYS	A	545	67.979	23.353	15.839	1.00	36.22
ATOM	2894	CD	LYS	A	545	69.134	22.991	14.921	1.00	37.09
ATOM	2895	CE	LYS	A	545	69.427	24.132	13.958	1.00	40.59
ATOM	2896	NZ	LYS	A	545	70.629	23.872	13.120	1.00	39.96
ATOM	2897	C	LYS	A	545	65.264	22.474	16.299	1.00	25.91
ATOM	2898	O	LYS	A	545	64.709	23.532	16.005	1.00	28.35
ATOM	2899	N	ARG	A	546	65.042	21.339	15.641	1.00	26.22
ATOM	2900	CA	ARG	A	546	64.151	21.259	14.492	1.00	24.26
ATOM	2901	CB	ARG	A	546	64.303	19.921	13.766	1.00	23.45
ATOM	2902	CG	ARG	A	546	65.536	19.807	12.885	1.00	22.43
ATOM	2903	CD	ARG	A	546	65.500	20.788	11.721	1.00	24.21
ATOM	2904	NE	ARG	A	546	66.805	20.917	11.086	1.00	31.76
ATOM	2905	CZ	ARG	A	546	67.310	20.154	10.130	1.00	34.74
ATOM	2906	NH1	ARG	A	546	66.625	19.141	9.615	1.00	36.83
ATOM	2907	NH2	ARG	A	546	68.527	20.407	9.662	1.00	37.54
ATOM	2908	C	ARG	A	546	62.684	21.518	14.803	1.00	22.70
ATOM	2909	O	ARG	A	546	61.928	21.853	13.882	1.00	17.36
ATOM	2910	N	VAL	A	547	62.258	21.401	16.058	1.00	20.96
ATOM	2911	CA	VAL	A	547	60.875	21.714	16.402	1.00	18.99
ATOM	2912	CB	VAL	A	547	60.339	20.962	17.623	1.00	16.13
ATOM	2913	CG1	VAL	A	547	58.846	21.229	17.781	1.00	10.83
ATOM	2914	CG2	VAL	A	547	60.601	19.466	17.505	1.00	14.61
ATOM	2915	C	VAL	A	547	60.778	23.224	16.643	1.00	20.73
ATOM	2916	O	VAL	A	547	59.739	23.836	16.374	1.00	23.16
ATOM	2917	N	PHE	A	548	61.896	23.799	17.107	1.00	2.00
ATOM	2918	CA	PHE	A	548	61.893	25.243	17.351	1.00	6.23
ATOM	2919	CB	PHE	A	548	63.087	25.685	18.187	1.00	2.00
ATOM	2920	CG	PHE	A	548	62.915	27.084	18.705	1.00	2.00
ATOM	2921	CD1	PHE	A	548	62.426	27.301	19.982	1.00	2.00
ATOM	2922	CD2	PHE	A	548	63.246	28.178	17.927	1.00	2.00
ATOM	2923	CE1	PHE	A	548	62.262	28.589	20.461	1.00	2.00
ATOM	2924	CE2	PHE	A	548	63.089	29.467	18.395	1.00	2.00
ATOM	2925	CZ	PHE	A	548	62.593	29.667	19.665	1.00	2.00
ATOM	2926	C	PHE	A	548	61.857	25.963	16.011	1.00	14.06
ATOM	2927	O	PHE	A	548	61.093	26.906	15.807	1.00	28.73
ATOM	2928	N	LYS	A	549	62.635	25.451	15.061	1.00	16.97
ATOM	2929	CA	LYS	A	549	62.690	26.027	13.721	1.00	18.55
ATOM	2930	CB	LYS	A	549	63.926	25.527	12.969	1.00	17.33
ATOM	2931	CG	LYS	A	549	65.242	25.859	13.655	1.00	15.86
ATOM	2932	CD	LYS	A	549	65.395	27.353	13.899	1.00	19.07
ATOM	2933	CE	LYS	A	549	66.861	27.734	14.058	1.00	29.09
ATOM	2934	NZ	LYS	A	549	67.561	26.806	14.993	1.00	34.36
ATOM	2935	C	LYS	A	549	61.422	25.751	12.925	1.00	12.92
ATOM	2936	O	LYS	A	549	61.116	26.487	11.985	1.00	10.12
ATOM	2937	N	ASN	A	550	60.702	24.690	13.282	1.00	14.90
ATOM	2938	CA	ASN	A	550	59.439	24.386	12.610	1.00	19.95
ATOM	2939	CB	ASN	A	550	59.041	22.927	12.768	1.00	18.35
ATOM	2940	CG	ASN	A	550	59.703	22.007	11.762	1.00	25.60
ATOM	2941	OD1	ASN	A	550	59.786	22.316	10.571	1.00	23.10
ATOM	2942	ND2	ASN	A	550	60.184	20.855	12.222	1.00	29.70
ATOM	2943	C	ASN	A	550	58.378	25.331	13.175	1.00	22.43
ATOM	2944	O	ASN	A	550	57.562	25.878	12.438	1.00	22.08
ATOM	2945	N	LEU	A	551	58.447	25.568	14.487	1.00	21.71
ATOM	2946	CA	LEU	A	551	57.516	26.481	15.140	1.00	19.79



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ATOM	2947	CB	LEU	A	551	57.768	26.513	16.645	1.00	23.51
ATOM	2948	CG	LEU	A	551	57.215	25.338	17.456	1.00	31.26
ATOM	2949	CD1	LEU	A	551	57.626	25.461	18.917	1.00	29.65
ATOM	2950	CD2	LEU	A	551	55.696	25.259	17.360	1.00	33.47
ATOM	2951	C	LEU	A	551	57.621	27.868	14.528	1.00	21.32
ATOM	2952	O	LEU	A	551	56.623	28.444	14.087	1.00	28.10
ATOM	2953	N	GLN	A	552	58.838	28.392	14.394	1.00	19.91
ATOM	2954	CA	GLN	A	552	59.048	29.703	13.790	1.00	26.55
ATOM	2955	CB	GLN	A	552	60.549	29.997	13.678	1.00	28.55
ATOM	2956	CG	GLN	A	552	61.260	29.888	15.019	1.00	35.03
ATOM	2957	CD	GLN	A	552	62.646	30.493	14.997	1.00	41.15
ATOM	2958	OE1	GLN	A	552	63.628	29.817	15.301	1.00	44.82
ATOM	2959	NE2	GLN	A	552	62.730	31.769	14.632	1.00	45.49
ATOM	2960	C	GLN	A	552	58.374	29.841	12.431	1.00	22.17
ATOM	2961	O	GLN	A	552	57.787	30.881	12.129	1.00	24.29
ATOM	2962	N	LEU	A	553	58.432	28.803	11.608	1.00	16.00
ATOM	2963	CA	LEU	A	553	57.806	28.769	10.301	1.00	20.25
ATOM	2964	CB	LEU	A	553	58.305	27.551	9.514	1.00	19.39
ATOM	2965	CG	LEU	A	553	58.791	27.815	8.087	1.00	20.05
ATOM	2966	CD1	LEU	A	553	60.301	28.026	8.069	1.00	20.61
ATOM	2967	CD2	LEU	A	553	58.383	26.689	7.149	1.00	14.58
ATOM	2968	C	LEU	A	553	56.283	28.705	10.405	1.00	23.03
ATOM	2969	O	LEU	A	553	55.565	29.264	9.570	1.00	27.48
ATOM	2970	N	PHE	A	554	55.765	28.064	11.452	1.00	18.53
ATOM	2971	CA	PHE	A	554	54.335	27.942	11.676	1.00	11.01
ATOM	2972	CB	PHE	A	554	54.009	26.844	12.687	1.00	7.00
ATOM	2973	CG	PHE	A	554	54.394	25.444	12.318	1.00	7.52
ATOM	2974	CD1	PHE	A	554	54.678	25.070	11.015	1.00	8.28
ATOM	2975	CD2	PHE	A	554	54.443	24.472	13.308	1.00	8.27
ATOM	2976	CE1	PHE	A	554	55.021	23.770	10.712	1.00	11.14
ATOM	2977	CE2	PHE	A	554	54.781	23.167	13.008	1.00	15.15
ATOM	2978	CZ	PHE	A	554	55.074	22.816	11.706	1.00	15.91
ATOM	2979	C	PHE	A	554	53.671	29.239	12.121	1.00	10.75
ATOM	2980	O	PHE	A	554	52.455	29.381	11.955	1.00	16.65
ATOM	2981	N	MET	A	555	54.427	30.188	12.658	1.00	2.20
ATOM	2982	CA	MET	A	555	53.872	31.468	13.073	1.00	4.12
ATOM	2983	CB	MET	A	555	54.431	31.881	14.438	1.00	12.23
ATOM	2984	CG	MET	A	555	54.154	30.879	15.549	1.00	14.47
ATOM	2985	SD	MET	A	555	55.354	31.017	16.886	1.00	26.69
ATOM	2986	CE	MET	A	555	55.126	32.721	17.391	1.00	25.77
ATOM	2987	C	MET	A	555	54.170	32.562	12.055	1.00	5.64
ATOM	2988	O	MET	A	555	53.788	33.714	12.260	1.00	5.24
ATOM	2989	N	GLU	A	556	54.870	32.215	10.978	1.00	12.95
ATOM	2990	CA	GLU	A	556	55.213	33.198	9.944	1.00	16.85
ATOM	2991	CB	GLU	A	556	56.174	32.577	8.937	1.00	21.95
ATOM	2992	CG	GLU	A	556	56.301	33.220	7.575	1.00	30.73
ATOM	2993	CD	GLU	A	556	56.915	34.601	7.551	1.00	39.34
ATOM	2994	OE1	GLU	A	556	58.117	34.730	7.870	1.00	48.45
ATOM	2995	OE2	GLU	A	556	56.195	35.563	7.201	1.00	39.71
ATOM	2996	C	GLU	A	556	53.952	33.717	9.286	1.00	15.60
ATOM	2997	O	GLU	A	556	52.956	33.002	9.144	1.00	12.81
ATOM	2998	N	ASN	A	557	53.935	34.963	8.840	1.00	19.68
ATOM	2999	CA	ASN	A	557	52.819	35.629	8.189	1.00	27.14
ATOM	3000	CB	ASN	A	557	52.785	35.397	6.680	1.00	29.15
ATOM	3001	CG	ASN	A	557	52.584	34.004	6.145	1.00	39.91
ATOM	3002	OD1	ASN	A	557	53.548	33.391	5.665	1.00	41.43
ATOM	3003	ND2	ASN	A	557	51.369	33.469	6.220	1.00	43.78
ATOM	3004	C	ASN	A	557	51.459	35.338	8.817	1.00	28.12
ATOM	3005	O	ASN	A	557	50.466	35.156	8.103	1.00	31.64
ATOM	3006	N	LYS	A	558	51.356	35.367	10.148	1.00	22.14
ATOM	3007	CA	LYS	A	558	50.108	35.065	10.824	1.00	22.52
ATOM	3008	CB	LYS	A	558	50.149	33.642	11.392	1.00	19.33
ATOM	3009	CG	LYS	A	558	49.798	32.525	10.416	1.00	8.72

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ATOM	3010	CD	LYS	A	558	50.097	31.192	11.086	1.00	6.84
ATOM	3011	CE	LYS	A	558	49.513	30.020	10.323	1.00	7.63
ATOM	3012	NZ	LYS	A	558	49.476	28.802	11.187	1.00	12.14
ATOM	3013	C	LYS	A	558	49.750	36.023	11.957	1.00	26.83
ATOM	3014	O	LYS	A	558	50.599	36.528	12.685	1.00	25.76
ATOM	3015	N	GLN	A	559	48.442	36.229	12.105	1.00	24.27
ATOM	3016	CA	GLN	A	559	47.882	37.076	13.147	1.00	18.58
ATOM	3017	CB	GLN	A	559	46.496	37.555	12.707	1.00	21.06
ATOM	3018	CG	GLN	A	559	46.465	38.556	11.569	1.00	24.46
ATOM	3019	CD	GLN	A	559	46.793	39.971	12.002	1.00	27.02
ATOM	3020	OE1	GLN	A	559	46.087	40.564	12.823	1.00	26.62
ATOM	3021	NE2	GLN	A	559	47.871	40.522	11.451	1.00	25.56
ATOM	3022	C	GLN	A	559	47.768	36.273	14.436	1.00	19.45
ATOM	3023	O	GLN	A	559	47.575	35.053	14.400	1.00	22.99
ATOM	3024	N	PRO	A	560	47.802	36.937	15.586	1.00	14.57
ATOM	3025	CD	PRO	A	560	48.012	38.405	15.692	1.00	12.80
ATOM	3026	CA	PRO	A	560	47.687	36.305	16.882	1.00	13.72
ATOM	3027	CB	PRO	A	560	47.646	37.471	17.871	1.00	8.36
ATOM	3028	CG	PRO	A	560	48.233	38.634	17.162	1.00	5.46
ATOM	3029	C	PRO	A	560	46.482	35.401	17.071	1.00	23.66
ATOM	3030	O	PRO	A	560	46.572	34.432	17.836	1.00	23.39
ATOM	3031	N	GLU	A	561	45.350	35.682	16.425	1.00	28.24
ATOM	3032	CA	GLU	A	561	44.154	34.870	16.533	1.00	31.28
ATOM	3033	CB	GLU	A	561	42.885	35.630	16.151	1.00	34.89
ATOM	3034	CG	GLU	A	561	42.834	37.116	16.430	1.00	39.99
ATOM	3035	CD	GLU	A	561	43.311	37.948	15.252	1.00	43.05
ATOM	3036	OE1	GLU	A	561	44.422	38.507	15.374	1.00	42.92
ATOM	3037	OE2	GLU	A	561	42.599	38.037	14.230	1.00	42.48
ATOM	3038	C	GLU	A	561	44.225	33.613	15.662	1.00	32.00
ATOM	3039	O	GLU	A	561	43.514	32.643	15.935	1.00	35.46
ATOM	3040	N	ASP	A	562	45.039	33.620	14.614	1.00	29.94
ATOM	3041	CA	ASP	A	562	45.159	32.465	13.733	1.00	31.59
ATOM	3042	CB	ASP	A	562	46.029	32.801	12.518	1.00	36.77
ATOM	3043	CG	ASP	A	562	45.289	33.662	11.508	1.00	46.06
ATOM	3044	OD1	ASP	A	562	44.119	34.027	11.769	1.00	50.38
ATOM	3045	OD2	ASP	A	562	45.886	33.969	10.452	1.00	44.93
ATOM	3046	C	ASP	A	562	45.716	31.239	14.446	1.00	31.51
ATOM	3047	O	ASP	A	562	46.520	31.361	15.370	1.00	34.99
ATOM	3048	N	ASP	A	563	45.279	30.059	14.008	1.00	26.54
ATOM	3049	CA	ASP	A	563	45.732	28.810	14.598	1.00	22.51
ATOM	3050	CB	ASP	A	563	44.983	27.597	14.063	1.00	22.77
ATOM	3051	CG	ASP	A	563	43.547	27.401	14.463	1.00	25.71
ATOM	3052	OD1	ASP	A	563	42.724	27.291	13.523	1.00	29.22
ATOM	3053	OD2	ASP	A	563	43.203	27.327	15.659	1.00	24.43
ATOM	3054	C	ASP	A	563	47.216	28.571	14.307	1.00	25.92
ATOM	3055	O	ASP	A	563	47.716	28.964	13.252	1.00	32.51
ATOM	3056	N	LEU	A	564	47.880	27.874	15.231	1.00	24.38
ATOM	3057	CA	LEU	A	564	49.277	27.530	14.995	1.00	19.20
ATOM	3058	CB	LEU	A	564	49.968	26.891	16.201	1.00	13.20
ATOM	3059	CG	LEU	A	564	51.468	26.638	15.988	1.00	7.42
ATOM	3060	CD1	LEU	A	564	52.220	27.964	15.987	1.00	2.00
ATOM	3061	CD2	LEU	A	564	52.051	25.700	17.030	1.00	11.42
ATOM	3062	C	LEU	A	564	49.322	26.521	13.841	1.00	18.84
ATOM	3063	O	LEU	A	564	49.972	26.747	12.824	1.00	21.35
ATOM	3064	N	PHE	A	565	48.582	25.428	14.024	1.00	17.01
ATOM	3065	CA	PHE	A	565	48.563	24.354	13.045	1.00	16.02
ATOM	3066	CB	PHE	A	565	48.497	22.994	13.753	1.00	7.77
ATOM	3067	CG	PHE	A	565	49.542	22.751	14.800	1.00	4.78
ATOM	3068	CD1	PHE	A	565	50.861	22.524	14.450	1.00	13.29
ATOM	3069	CD2	PHE	A	565	49.208	22.740	16.146	1.00	2.00
ATOM	3070	CE1	PHE	A	565	51.827	22.300	15.416	1.00	14.65
ATOM	3071	CE2	PHE	A	565	50.160	22.511	17.118	1.00	3.50
ATOM	3072	CZ	PHE	A	565	51.476	22.294	16.751	1.00	12.37

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ATOM	3073	C	PHE	A	565	47.473	24.452	11.986	1.00	20.95
ATOM	3074	O	PHE	A	565	46.514	23.672	11.965	1.00	25.73
ATOM	3075	N	ASP	A	566	47.641	25.382	11.045	1.00	17.29
ATOM	3076	CA	ASP	A	566	46.706	25.490	9.920	1.00	13.80
ATOM	3077	CB	ASP	A	566	46.952	26.763	9.121	1.00	19.80
ATOM	3078	CG	ASP	A	566	48.210	26.725	8.271	1.00	25.10
ATOM	3079	OD1	ASP	A	566	49.323	26.940	8.796	1.00	27.01
ATOM	3080	OD2	ASP	A	566	48.089	26.454	7.055	1.00	27.30
ATOM	3081	C	ASP	A	566	46.954	24.251	9.069	1.00	18.06
ATOM	3082	O	ASP	A	566	48.108	23.811	8.977	1.00	13.59
ATOM	3083	N	ARG	A	567	45.947	23.649	8.458	1.00	24.60
ATOM	3084	CA	ARG	A	567	46.093	22.441	7.656	1.00	21.36
ATOM	3085	CB	ARG	A	567	47.368	22.404	6.821	1.00	25.89
ATOM	3086	CG	ARG	A	567	47.516	23.392	5.675	1.00	31.59
ATOM	3087	CD	ARG	A	567	48.904	23.299	5.054	1.00	32.90
ATOM	3088	NE	ARG	A	567	49.299	24.519	4.361	1.00	36.80
ATOM	3089	CZ	ARG	A	567	50.438	24.678	3.693	1.00	39.68
ATOM	3090	NH1	ARG	A	567	51.323	23.691	3.609	1.00	37.64
ATOM	3091	NH2	ARG	A	567	50.697	25.835	3.096	1.00	41.21
ATOM	3092	C	ARG	A	567	46.027	21.192	8.544	1.00	19.40
ATOM	3093	O	ARG	A	567	46.188	20.073	8.050	1.00	16.08
ATOM	3094	N	LEU	A	568	45.784	21.369	9.842	1.00	10.12
ATOM	3095	CA	LEU	A	568	45.683	20.285	10.790	1.00	11.78
ATOM	3096	CB	LEU	A	568	46.866	20.289	11.778	1.00	5.15
ATOM	3097	CG	LEU	A	568	46.922	19.028	12.660	1.00	2.00
ATOM	3098	CD1	LEU	A	568	47.629	17.929	11.877	1.00	4.13
ATOM	3099	CD2	LEU	A	568	47.524	19.262	14.034	1.00	2.00
ATOM	3100	C	LEU	A	568	44.409	20.321	11.639	1.00	22.24
ATOM	3101	O	LEU	A	568	43.826	21.359	11.948	1.00	28.87
ATOM	3102	N	ASN	A	569	43.977	19.140	12.069	1.00	20.11
ATOM	3103	CA	ASN	A	569	42.834	18.977	12.955	1.00	18.03
ATOM	3104	CB	ASN	A	569	41.501	19.124	12.252	1.00	21.41
ATOM	3105	CG	ASN	A	569	41.242	18.268	11.040	1.00	23.40
ATOM	3106	OD1	ASN	A	569	40.560	18.706	10.105	1.00	23.68
ATOM	3107	ND2	ASN	A	569	41.748	17.042	11.013	1.00	18.89
ATOM	3108	C	ASN	A	569	42.978	17.646	13.694	1.00	17.58
ATOM	3109	O	ASN	A	569	44.023	16.992	13.590	1.00	18.25
ATOM	3110	N	THR	A	570	41.950	17.244	14.440	1.00	2.00
ATOM	3111	CA	THR	A	570	42.019	15.986	15.181	1.00	6.58
ATOM	3112	CB	THR	A	570	41.236	16.050	16.502	1.00	8.70
ATOM	3113	OG1	THR	A	570	39.837	16.076	16.189	1.00	21.35
ATOM	3114	CG2	THR	A	570	41.620	17.305	17.265	1.00	9.57
ATOM	3115	C	THR	A	570	41.500	14.829	14.338	1.00	2.00
ATOM	3116	O	THR	A	570	41.607	13.661	14.703	1.00	8.22
ATOM	3117	N	GLY	A	571	40.931	15.143	13.183	1.00	2.00
ATOM	3118	CA	GLY	A	571	40.420	14.142	12.253	1.00	7.75
ATOM	3119	C	GLY	A	571	41.557	13.626	11.373	1.00	9.89
ATOM	3120	O	GLY	A	571	41.563	12.480	10.925	1.00	2.00
ATOM	3121	N	ILE	A	572	42.543	14.488	11.122	1.00	15.19
ATOM	3122	CA	ILE	A	572	43.716	14.096	10.349	1.00	12.98
ATOM	3123	CB	ILE	A	572	44.377	15.247	9.579	1.00	11.91
ATOM	3124	CG2	ILE	A	572	45.619	14.735	8.852	1.00	14.60
ATOM	3125	CG1	ILE	A	572	43.423	15.875	8.560	1.00	17.88
ATOM	3126	CD1	ILE	A	572	44.026	17.007	7.749	1.00	19.55
ATOM	3127	C	ILE	A	572	44.750	13.452	11.278	1.00	15.95
ATOM	3128	O	ILE	A	572	45.323	12.408	10.952	1.00	14.59
ATOM	3129	N	LEU	A	573	44.974	14.041	12.456	1.00	12.73
ATOM	3130	CA	LEU	A	573	45.953	13.483	13.383	1.00	6.52
ATOM	3131	CB	LEU	A	573	46.129	14.357	14.629	1.00	5.23
ATOM	3132	CG	LEU	A	573	47.132	13.831	15.664	1.00	2.00
ATOM	3133	CD1	LEU	A	573	48.500	13.652	15.022	1.00	2.00
ATOM	3134	CD2	LEU	A	573	47.253	14.734	16.883	1.00	2.00
ATOM	3135	C	LEU	A	573	45.617	12.048	13.774	1.00	6.59

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ATOM	3136	O	LEU	A	573	46.487	11.172	13.750	1.00	4.99
ATOM	3137	N	ASN	A	574	44.358	11.778	14.118	1.00	7.64
ATOM	3138	CA	ASN	A	574	43.954	10.434	14.514	1.00	4.92
ATOM	3139	CB	ASN	A	574	42.579	10.432	15.183	1.00	2.00
ATOM	3140	CG	ASN	A	574	42.633	11.327	16.418	1.00	2.00
ATOM	3141	OD1	ASN	A	574	43.675	11.364	17.082	1.00	2.00
ATOM	3142	ND2	ASN	A	574	41.546	12.037	16.683	1.00	4.65
ATOM	3143	C	ASN	A	574	43.979	9.480	13.331	1.00	8.31
ATOM	3144	O	ASN	A	574	44.357	8.314	13.476	1.00	2.00
ATOM	3145	N	LYS	A	575	43.616	9.988	12.156	1.00	8.78
ATOM	3146	CA	LYS	A	575	43.640	9.162	10.953	1.00	13.25
ATOM	3147	CB	LYS	A	575	43.308	9.969	9.703	1.00	16.77
ATOM	3148	CG	LYS	A	575	43.026	9.114	8.474	1.00	19.28
ATOM	3149	CD	LYS	A	575	41.747	8.303	8.678	1.00	20.52
ATOM	3150	CE	LYS	A	575	41.144	7.931	7.333	1.00	17.35
ATOM	3151	NZ	LYS	A	575	42.124	7.184	6.491	1.00	14.75
ATOM	3152	C	LYS	A	575	45.031	8.549	10.814	1.00	17.55
ATOM	3153	O	LYS	A	575	45.193	7.332	10.791	1.00	26.04
ATOM	3154	N	HIS	A	576	46.032	9.424	10.753	1.00	18.71
ATOM	3155	CA	HIS	A	576	47.428	8.988	10.690	1.00	12.79
ATOM	3156	CB	HIS	A	576	48.335	10.212	10.717	1.00	13.82
ATOM	3157	CG	HIS	A	576	49.792	9.909	10.830	1.00	21.98
ATOM	3158	CD2	HIS	A	576	50.576	9.098	10.076	1.00	29.94
ATOM	3159	ND1	HIS	A	576	50.610	10.447	11.797	1.00	24.18
ATOM	3160	CE1	HIS	A	576	51.839	9.989	11.634	1.00	28.35
ATOM	3161	NE2	HIS	A	576	51.845	9.168	10.599	1.00	33.48
ATOM	3162	C	HIS	A	576	47.700	8.043	11.849	1.00	18.18
ATOM	3163	O	HIS	A	576	47.922	6.844	11.643	1.00	16.44
ATOM	3164	N	LEU	A	577	47.512	8.482	13.092	1.00	16.73
ATOM	3165	CA	LEU	A	577	47.671	7.663	14.282	1.00	18.79
ATOM	3166	CB	LEU	A	577	47.147	8.447	15.495	1.00	16.02
ATOM	3167	CG	LEU	A	577	48.119	9.462	16.098	1.00	13.61
ATOM	3168	CD1	LEU	A	577	47.397	10.478	16.970	1.00	14.79
ATOM	3169	CD2	LEU	A	577	49.188	8.740	16.910	1.00	8.62
ATOM	3170	C	LEU	A	577	47.001	6.298	14.209	1.00	21.74
ATOM	3171	O	LEU	A	577	47.450	5.328	14.833	1.00	24.12
ATOM	3172	N	GLN	A	578	45.906	6.176	13.470	1.00	20.10
ATOM	3173	CA	GLN	A	578	45.195	4.926	13.266	1.00	23.75
ATOM	3174	CB	GLN	A	578	43.778	5.219	12.773	1.00	15.12
ATOM	3175	CG	GLN	A	578	42.923	4.011	12.468	1.00	14.12
ATOM	3176	CD	GLN	A	578	42.918	2.989	13.585	1.00	21.60
ATOM	3177	OE1	GLN	A	578	42.719	3.323	14.755	1.00	25.72
ATOM	3178	NE2	GLN	A	578	43.150	1.732	13.220	1.00	23.89
ATOM	3179	C	GLN	A	578	45.968	4.006	12.324	1.00	23.19
ATOM	3180	O	GLN	A	578	45.880	2.780	12.432	1.00	22.91
ATOM	3181	N	ASP	A	579	46.764	4.585	11.430	1.00	21.34
ATOM	3182	CA	ASP	A	579	47.592	3.836	10.496	1.00	24.94
ATOM	3183	CB	ASP	A	579	47.956	4.697	9.283	1.00	26.18
ATOM	3184	CG	ASP	A	579	46.721	5.174	8.541	1.00	37.55
ATOM	3185	OD1	ASP	A	579	45.692	4.462	8.591	1.00	43.08
ATOM	3186	OD2	ASP	A	579	46.769	6.255	7.914	1.00	38.13
ATOM	3187	C	ASP	A	579	48.866	3.316	11.156	1.00	28.24
ATOM	3188	O	ASP	A	579	49.376	2.262	10.771	1.00	30.83
ATOM	3189	N	LEU	A	580	49.386	4.046	12.141	1.00	28.98
ATOM	3190	CA	LEU	A	580	50.572	3.589	12.864	1.00	26.12
ATOM	3191	CB	LEU	A	580	51.139	4.706	13.735	1.00	27.19
ATOM	3192	CG	LEU	A	580	51.513	6.012	13.026	1.00	32.29
ATOM	3193	CD1	LEU	A	580	52.031	7.053	14.011	1.00	34.00
ATOM	3194	CD2	LEU	A	580	52.548	5.770	11.937	1.00	33.37
ATOM	3195	C	LEU	A	580	50.211	2.343	13.675	1.00	29.05
ATOM	3196	O	LEU	A	580	50.794	1.276	13.455	1.00	26.37
ATOM	3197	N	MET	A	581	49.218	2.442	14.559	1.00	23.92
ATOM	3198	CA	MET	A	581	48.786	1.314	15.374	1.00	23.59

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ATOM	3199	CB	MET	A	581	49.368	1.425	16.790	1.00	26.12
ATOM	3200	CG	MET	A	581	49.075	0.216	17.664	1.00	29.62
ATOM	3201	SD	MET	A	581	49.322	0.531	19.420	1.00	41.54
ATOM	3202	CE	MET	A	581	48.051	1.754	19.729	1.00	35.07
ATOM	3203	C	MET	A	581	47.268	1.201	15.476	1.00	23.80
ATOM	3204	O	MET	A	581	46.591	2.132	15.916	1.00	27.05
ATOM	3205	N	GLU	A	582	46.725	0.038	15.128	1.00	19.04
ATOM	3206	CA	GLU	A	582	45.294	-0.196	15.152	1.00	17.61
ATOM	3207	CB	GLU	A	582	44.925	-1.656	14.882	1.00	19.55
ATOM	3208	CG	GLU	A	582	45.574	-2.306	13.680	1.00	26.42
ATOM	3209	CD	GLU	A	582	46.891	-2.988	13.993	1.00	28.67
ATOM	3210	OE1	GLU	A	582	47.862	-2.293	14.368	1.00	25.79
ATOM	3211	OE2	GLU	A	582	46.976	-4.232	13.872	1.00	28.77
ATOM	3212	C	GLU	A	582	44.634	0.210	16.467	1.00	14.78
ATOM	3213	O	GLU	A	582	44.813	-0.443	17.493	1.00	18.90
ATOM	3214	N	GLY	A	583	43.828	1.265	16.405	1.00	14.33
ATOM	3215	CA	GLY	A	583	43.087	1.717	17.573	1.00	22.58
ATOM	3216	C	GLY	A	583	43.805	2.805	18.352	1.00	18.29
ATOM	3217	O	GLY	A	583	43.424	3.121	19.482	1.00	27.84
ATOM	3218	N	LEU	A	584	44.833	3.379	17.738	1.00	10.19
ATOM	3219	CA	LEU	A	584	45.589	4.429	18.407	1.00	12.92
ATOM	3220	CB	LEU	A	584	47.048	4.481	17.939	1.00	13.06
ATOM	3221	CG	LEU	A	584	47.933	5.481	18.691	1.00	11.42
ATOM	3222	CD1	LEU	A	584	47.890	5.229	20.193	1.00	11.80
ATOM	3223	CD2	LEU	A	584	49.370	5.428	18.201	1.00	15.58
ATOM	3224	C	LEU	A	584	44.938	5.788	18.187	1.00	12.51
ATOM	3225	O	LEU	A	584	44.556	6.131	17.070	1.00	20.81
ATOM	3226	N	THR	A	585	44.827	6.557	19.263	1.00	2.00
ATOM	3227	CA	THR	A	585	44.215	7.883	19.206	1.00	9.77
ATOM	3228	CB	THR	A	585	42.723	7.763	19.570	1.00	14.82
ATOM	3229	OG1	THR	A	585	42.503	6.559	20.323	1.00	13.23
ATOM	3230	CG2	THR	A	585	41.863	7.728	18.314	1.00	13.48
ATOM	3231	C	THR	A	585	44.943	8.881	20.084	1.00	9.56
ATOM	3232	O	THR	A	585	45.646	8.531	21.038	1.00	12.44
ATOM	3233	N	ALA	A	586	44.756	10.171	19.841	1.00	2.00
ATOM	3234	CA	ALA	A	586	45.412	11.271	20.519	1.00	2.00
ATOM	3235	CB	ALA	A	586	44.794	12.554	19.968	1.00	2.00
ATOM	3236	C	ALA	A	586	45.390	11.298	22.035	1.00	12.06
ATOM	3237	O	ALA	A	586	46.274	11.910	22.655	1.00	22.11
ATOM	3238	N	LYS	A	587	44.404	10.680	22.672	1.00	7.75
ATOM	3239	CA	LYS	A	587	44.309	10.634	24.120	1.00	3.76
ATOM	3240	CB	LYS	A	587	42.850	10.751	24.573	1.00	2.00
ATOM	3241	CG	LYS	A	587	42.109	9.435	24.617	1.00	2.00
ATOM	3242	CD	LYS	A	587	40.620	9.498	24.331	1.00	2.00
ATOM	3243	CE	LYS	A	587	40.104	8.057	24.255	1.00	2.00
ATOM	3244	NZ	LYS	A	587	40.517	7.241	25.431	1.00	13.68
ATOM	3245	C	LYS	A	587	44.929	9.345	24.650	1.00	4.55
ATOM	3246	O	LYS	A	587	44.898	9.143	25.870	1.00	2.00
ATOM	3247	N	VAL	A	588	45.438	8.476	23.762	1.00	2.00
ATOM	3248	CA	VAL	A	588	46.080	7.272	24.313	1.00	2.00
ATOM	3249	CB	VAL	A	588	46.459	6.214	23.283	1.00	5.02
ATOM	3250	CG1	VAL	A	588	46.913	4.955	24.017	1.00	2.00
ATOM	3251	CG2	VAL	A	588	45.277	5.885	22.385	1.00	2.00
ATOM	3252	C	VAL	A	588	47.309	7.731	25.093	1.00	8.96
ATOM	3253	O	VAL	A	588	47.472	7.467	26.282	1.00	9.74
ATOM	3254	N	PHE	A	589	48.142	8.549	24.461	1.00	10.17
ATOM	3255	CA	PHE	A	589	49.334	9.149	25.019	1.00	2.00
ATOM	3256	CB	PHE	A	589	49.793	10.288	24.091	1.00	2.00
ATOM	3257	CG	PHE	A	589	50.442	9.749	22.844	1.00	14.37
ATOM	3258	CD1	PHE	A	589	49.769	9.739	21.634	1.00	12.02
ATOM	3259	CD2	PHE	A	589	51.735	9.244	22.901	1.00	12.14
ATOM	3260	CE1	PHE	A	589	50.378	9.245	20.496	1.00	10.96
ATOM	3261	CE2	PHE	A	589	52.345	8.746	21.770	1.00	10.41

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ATOM	3262	CZ	PHE	A	589	51.664	8.752	20.565	1.00	15.04
ATOM	3263	C	PHE	A	589	49.172	9.708	26.424	1.00	8.93
ATOM	3264	O	PHE	A	589	50.116	9.647	27.224	1.00	17.92
ATOM	3265	N	ARG	A	590	48.018	10.275	26.751	1.00	3.21
ATOM	3266	CA	ARG	A	590	47.729	10.783	28.078	1.00	2.00
ATOM	3267	CB	ARG	A	590	46.408	11.537	28.148	1.00	2.00
ATOM	3268	CG	ARG	A	590	46.433	12.895	27.457	1.00	2.00
ATOM	3269	CD	ARG	A	590	45.321	13.753	28.040	1.00	4.81
ATOM	3270	NE	ARG	A	590	45.796	15.097	28.364	1.00	9.44
ATOM	3271	CZ	ARG	A	590	45.536	15.652	29.549	1.00	16.84
ATOM	3272	NH1	ARG	A	590	44.843	14.968	30.453	1.00	18.09
ATOM	3273	NH2	ARG	A	590	45.970	16.871	29.834	1.00	21.41
ATOM	3274	C	ARG	A	590	47.679	9.616	29.068	1.00	2.00
ATOM	3275	O	ARG	A	590	48.168	9.706	30.190	1.00	2.00
ATOM	3276	N	THR	A	591	47.087	8.515	28.617	1.00	3.66
ATOM	3277	CA	THR	A	591	47.007	7.312	29.441	1.00	2.00
ATOM	3278	CB	THR	A	591	46.038	6.276	28.851	1.00	2.00
ATOM	3279	OG1	THR	A	591	44.729	6.860	28.741	1.00	2.00
ATOM	3280	CG2	THR	A	591	45.966	5.011	29.685	1.00	2.00
ATOM	3281	C	THR	A	591	48.406	6.714	29.547	1.00	2.00
ATOM	3282	O	THR	A	591	48.896	6.445	30.643	1.00	19.40
ATOM	3283	N	TYR	A	592	49.047	6.537	28.398	1.00	2.00
ATOM	3284	CA	TYR	A	592	50.395	5.978	28.352	1.00	8.05
ATOM	3285	CB	TYR	A	592	50.929	5.985	26.915	1.00	10.77
ATOM	3286	CG	TYR	A	592	52.389	5.586	26.819	1.00	20.04
ATOM	3287	CD1	TYR	A	592	52.800	4.297	27.136	1.00	26.58
ATOM	3288	CE1	TYR	A	592	54.132	3.935	27.055	1.00	31.31
ATOM	3289	CD2	TYR	A	592	53.349	6.504	26.418	1.00	18.19
ATOM	3290	CE2	TYR	A	592	54.681	6.148	26.328	1.00	27.19
ATOM	3291	CZ	TYR	A	592	55.067	4.864	26.651	1.00	32.27
ATOM	3292	OH	TYR	A	592	56.397	4.517	26.567	1.00	36.16
ATOM	3293	C	TYR	A	592	51.368	6.690	29.284	1.00	2.00
ATOM	3294	O	TYR	A	592	51.871	6.104	30.243	1.00	5.93
ATOM	3295	N	ASN	A	593	51.618	7.968	29.020	1.00	6.84
ATOM	3296	CA	ASN	A	593	52.523	8.794	29.793	1.00	11.47
ATOM	3297	CB	ASN	A	593	52.566	10.221	29.236	1.00	19.66
ATOM	3298	CG	ASN	A	593	53.160	10.360	27.855	1.00	26.65
ATOM	3299	OD1	ASN	A	593	52.532	10.946	26.966	1.00	31.99
ATOM	3300	ND2	ASN	A	593	54.364	9.853	27.626	1.00	24.38
ATOM	3301	C	ASN	A	593	52.173	8.875	31.275	1.00	16.19
ATOM	3302	O	ASN	A	593	53.074	8.891	32.119	1.00	25.82
ATOM	3303	N	ALA	A	594	50.893	8.969	31.601	1.00	11.05
ATOM	3304	CA	ALA	A	594	50.440	9.049	32.980	1.00	6.02
ATOM	3305	CB	ALA	A	594	48.970	9.468	33.002	1.00	2.00
ATOM	3306	C	ALA	A	594	50.632	7.725	33.709	1.00	2.00
ATOM	3307	O	ALA	A	594	51.034	7.725	34.874	1.00	4.50
ATOM	3308	N	SER	A	595	50.313	6.617	33.045	1.00	2.00
ATOM	3309	CA	SER	A	595	50.420	5.288	33.638	1.00	7.50
ATOM	3310	CB	SER	A	595	49.723	4.233	32.777	1.00	13.57
ATOM	3311	OG	SER	A	595	48.309	4.314	32.782	1.00	2.00
ATOM	3312	C	SER	A	595	51.877	4.882	33.852	1.00	2.00
ATOM	3313	O	SER	A	595	52.260	4.431	34.932	1.00	2.00
ATOM	3314	N	ILE	A	596	52.703	5.081	32.819	1.00	7.73
ATOM	3315	CA	ILE	A	596	54.120	4.752	32.967	1.00	2.00
ATOM	3316	CB	ILE	A	596	54.920	4.857	31.669	1.00	7.22
ATOM	3317	CG2	ILE	A	596	55.113	6.290	31.204	1.00	9.25
ATOM	3318	CG1	ILE	A	596	56.285	4.179	31.857	1.00	11.69
ATOM	3319	CD1	ILE	A	596	56.202	2.679	32.056	1.00	13.46
ATOM	3320	C	ILE	A	596	54.719	5.594	34.091	1.00	10.18
ATOM	3321	O	ILE	A	596	55.257	5.004	35.045	1.00	8.88
ATOM	3322	N	THR	A	597	54.545	6.921	34.070	1.00	2.00
ATOM	3323	CA	THR	A	597	55.082	7.748	35.145	1.00	6.59
ATOM	3324	CB	THR	A	597	54.599	9.201	35.176	1.00	2.00

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ATOM	3325	OG1	THR	A	597	55.136	9.977	34.095	1.00	2.00
ATOM	3326	CG2	THR	A	597	55.049	9.896	36.459	1.00	2.00
ATOM	3327	C	THR	A	597	54.793	7.073	36.490	1.00	11.99
ATOM	3328	O	THR	A	597	55.752	6.682	37.164	1.00	17.40
ATOM	3329	N	LEU	A	598	53.524	6.909	36.858	1.00	9.52
ATOM	3330	CA	LEU	A	598	53.217	6.254	38.128	1.00	12.00
ATOM	3331	CB	LEU	A	598	51.753	5.832	38.222	1.00	2.00
ATOM	3332	CG	LEU	A	598	51.184	5.573	39.614	1.00	2.00
ATOM	3333	CD1	LEU	A	598	51.013	6.875	40.385	1.00	2.00
ATOM	3334	CD2	LEU	A	598	49.867	4.813	39.550	1.00	2.00
ATOM	3335	C	LEU	A	598	54.145	5.063	38.358	1.00	21.83
ATOM	3336	O	LEU	A	598	55.054	5.154	39.196	1.00	16.80
ATOM	3337	N	GLN	A	599	53.998	3.984	37.594	1.00	23.18
ATOM	3338	CA	GLN	A	599	54.837	2.799	37.734	1.00	25.44
ATOM	3339	CB	GLN	A	599	54.703	1.912	36.491	1.00	20.57
ATOM	3340	CG	GLN	A	599	55.330	0.531	36.597	1.00	14.62
ATOM	3341	CD	GLN	A	599	54.808	-0.417	35.533	1.00	17.73
ATOM	3342	OE1	GLN	A	599	54.994	-0.199	34.333	1.00	15.51
ATOM	3343	NE2	GLN	A	599	54.139	-1.480	35.981	1.00	13.27
ATOM	3344	C	GLN	A	599	56.298	3.130	38.019	1.00	28.58
ATOM	3345	O	GLN	A	599	56.882	2.666	39.004	1.00	28.58
ATOM	3346	N	GLN	A	600	56.922	3.928	37.168	1.00	28.61
ATOM	3347	CA	GLN	A	600	58.308	4.357	37.315	1.00	26.35
ATOM	3348	CB	GLN	A	600	58.619	5.267	36.128	1.00	27.01
ATOM	3349	CG	GLN	A	600	59.786	6.222	36.256	1.00	32.45
ATOM	3350	CD	GLN	A	600	59.683	7.322	35.208	1.00	36.22
ATOM	3351	OE1	GLN	A	600	58.762	8.142	35.275	1.00	28.15
ATOM	3352	NE2	GLN	A	600	60.614	7.314	34.257	1.00	35.36
ATOM	3353	C	GLN	A	600	58.562	5.046	38.649	1.00	22.89
ATOM	3354	O	GLN	A	600	59.450	4.641	39.408	1.00	21.62
ATOM	3355	N	GLN	A	601	57.783	6.081	38.961	1.00	17.60
ATOM	3356	CA	GLN	A	601	57.936	6.802	40.223	1.00	17.01
ATOM	3357	CB	GLN	A	601	56.912	7.926	40.330	1.00	15.09
ATOM	3358	CG	GLN	A	601	57.178	9.082	39.385	1.00	14.23
ATOM	3359	CD	GLN	A	601	58.299	9.984	39.859	1.00	24.45
ATOM	3360	OE1	GLN	A	601	58.440	11.076	39.294	1.00	26.87
ATOM	3361	NE2	GLN	A	601	59.069	9.559	40.858	1.00	20.24
ATOM	3362	C	GLN	A	601	57.826	5.862	41.414	1.00	20.99
ATOM	3363	O	GLN	A	601	58.765	5.701	42.196	1.00	24.45
ATOM	3364	N	LEU	A	602	56.712	5.141	41.510	1.00	19.15
ATOM	3365	CA	LEU	A	602	56.502	4.144	42.555	1.00	14.93
ATOM	3366	CB	LEU	A	602	55.250	3.330	42.214	1.00	14.97
ATOM	3367	CG	LEU	A	602	53.934	4.116	42.161	1.00	9.23
ATOM	3368	CD1	LEU	A	602	52.862	3.321	41.438	1.00	4.94
ATOM	3369	CD2	LEU	A	602	53.456	4.462	43.566	1.00	17.26
ATOM	3370	C	LEU	A	602	57.732	3.260	42.716	1.00	12.78
ATOM	3371	O	LEU	A	602	58.207	3.049	43.835	1.00	10.94
ATOM	3372	N	LYS	A	603	58.291	2.773	41.611	1.00	11.26
ATOM	3373	CA	LYS	A	603	59.506	1.980	41.624	1.00	16.84
ATOM	3374	CB	LYS	A	603	59.919	1.566	40.203	1.00	17.41
ATOM	3375	CG	LYS	A	603	61.315	0.987	40.074	1.00	11.73
ATOM	3376	CD	LYS	A	603	61.529	0.244	38.767	1.00	17.32
ATOM	3377	CE	LYS	A	603	62.939	-0.320	38.665	1.00	20.08
ATOM	3378	NZ	LYS	A	603	63.308	-1.206	39.807	1.00	2.00
ATOM	3379	C	LYS	A	603	60.646	2.767	42.269	1.00	16.70
ATOM	3380	O	LYS	A	603	61.355	2.216	43.111	1.00	17.13
ATOM	3381	N	GLU	A	604	60.806	4.027	41.865	1.00	12.36
ATOM	3382	CA	GLU	A	604	61.898	4.847	42.366	1.00	13.57
ATOM	3383	CB	GLU	A	604	62.191	5.984	41.373	1.00	6.63
ATOM	3384	CG	GLU	A	604	63.007	5.510	40.176	1.00	12.29
ATOM	3385	CD	GLU	A	604	62.996	6.526	39.051	1.00	19.57
ATOM	3386	OE1	GLU	A	604	62.973	7.736	39.367	1.00	20.13
ATOM	3387	OE2	GLU	A	604	63.008	6.124	37.870	1.00	27.28

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ATOM	3388	C	GLU	A	604	61.763	5.415	43.763	1.00	16.78
ATOM	3389	O	GLU	A	604	62.798	5.508	44.448	1.00	30.52
ATOM	3390	N	LEU	A	605	60.583	5.787	44.237	1.00	10.04
ATOM	3391	CA	LEU	A	605	60.450	6.359	45.566	1.00	11.57
ATOM	3392	CB	LEU	A	605	59.388	7.474	45.545	1.00	10.92
ATOM	3393	CG	LEU	A	605	59.426	8.475	44.398	1.00	13.83
ATOM	3394	CD1	LEU	A	605	58.130	9.282	44.380	1.00	12.22
ATOM	3395	CD2	LEU	A	605	60.638	9.383	44.510	1.00	6.63
ATOM	3396	C	LEU	A	605	60.019	5.442	46.701	1.00	16.48
ATOM	3397	O	LEU	A	605	59.955	5.952	47.836	1.00	16.40
ATOM	3398	N	THR	A	606	59.648	4.191	46.460	1.00	19.55
ATOM	3399	CA	THR	A	606	59.173	3.356	47.564	1.00	17.93
ATOM	3400	CB	THR	A	606	58.101	2.346	47.111	1.00	13.44
ATOM	3401	OG1	THR	A	606	57.274	2.958	46.117	1.00	17.70
ATOM	3402	CG2	THR	A	606	57.248	1.933	48.299	1.00	8.35
ATOM	3403	C	THR	A	606	60.279	2.581	48.270	1.00	19.84
ATOM	3404	O	THR	A	606	60.743	1.549	47.779	1.00	13.11
ATOM	3405	N	ALA	A	607	60.647	3.068	49.454	1.00	21.14
ATOM	3406	CA	ALA	A	607	61.678	2.385	50.235	1.00	25.29
ATOM	3407	CB	ALA	A	607	62.248	3.319	51.286	1.00	33.76
ATOM	3408	C	ALA	A	607	61.076	1.132	50.865	1.00	20.33
ATOM	3409	O	ALA	A	607	59.918	1.131	51.280	1.00	19.78
ATOM	3410	N	PRO	A	608	61.869	0.072	50.946	1.00	17.33
ATOM	3411	CD	PRO	A	608	63.263	0.023	50.443	1.00	17.92
ATOM	3412	CA	PRO	A	608	61.440	-1.194	51.497	1.00	24.36
ATOM	3413	CB	PRO	A	608	62.528	-2.176	51.056	1.00	19.36
ATOM	3414	CG	PRO	A	608	63.739	-1.350	50.818	1.00	19.70
ATOM	3415	C	PRO	A	608	61.242	-1.258	52.999	1.00	28.30
ATOM	3416	O	PRO	A	608	60.406	-2.039	53.474	1.00	31.40
ATOM	3417	N	ASP	A	609	61.990	-0.474	53.765	1.00	30.71
ATOM	3418	CA	ASP	A	609	61.899	-0.497	55.217	1.00	36.75
ATOM	3419	CB	ASP	A	609	63.284	-0.162	55.808	1.00	41.16
ATOM	3420	CG	ASP	A	609	63.837	1.134	55.237	1.00	44.46
ATOM	3421	OD1	ASP	A	609	64.653	1.059	54.293	1.00	48.22
ATOM	3422	OD2	ASP	A	609	63.453	2.217	55.725	1.00	43.27
ATOM	3423	C	ASP	A	609	60.879	0.450	55.829	1.00	35.22
ATOM	3424	O	ASP	A	609	60.631	0.340	57.037	1.00	38.28
ATOM	3425	N	GLU	A	610	60.333	1.386	55.060	1.00	31.00
ATOM	3426	CA	GLU	A	610	59.382	2.338	55.625	1.00	26.77
ATOM	3427	CB	GLU	A	610	59.127	3.510	54.680	1.00	30.03
ATOM	3428	CG	GLU	A	610	60.129	4.645	54.826	1.00	34.66
ATOM	3429	CD	GLU	A	610	59.920	5.485	56.071	1.00	40.06
ATOM	3430	OE1	GLU	A	610	60.010	6.733	55.975	1.00	41.15
ATOM	3431	OE2	GLU	A	610	59.652	4.932	57.160	1.00	38.55
ATOM	3432	C	GLU	A	610	58.079	1.661	56.024	1.00	26.41
ATOM	3433	O	GLU	A	610	57.743	0.574	55.558	1.00	26.31
ATOM	3434	N	ASN	A	611	57.356	2.313	56.927	1.00	26.53
ATOM	3435	CA	ASN	A	611	56.075	1.808	57.409	1.00	21.46
ATOM	3436	CB	ASN	A	611	55.837	2.272	58.849	1.00	18.70
ATOM	3437	CG	ASN	A	611	56.035	3.776	58.955	1.00	26.21
ATOM	3438	OD1	ASN	A	611	55.070	4.539	58.940	1.00	30.06
ATOM	3439	ND2	ASN	A	611	57.288	4.212	59.041	1.00	29.06
ATOM	3440	C	ASN	A	611	54.951	2.297	56.501	1.00	22.67
ATOM	3441	O	ASN	A	611	55.128	3.230	55.714	1.00	20.31
ATOM	3442	N	ILE	A	612	53.775	1.694	56.656	1.00	23.27
ATOM	3443	CA	ILE	A	612	52.611	2.033	55.849	1.00	13.12
ATOM	3444	CB	ILE	A	612	51.327	1.394	56.406	1.00	13.04
ATOM	3445	CG2	ILE	A	612	50.071	2.025	55.825	1.00	20.46
ATOM	3446	CG1	ILE	A	612	51.385	-0.108	56.094	1.00	11.97
ATOM	3447	CD1	ILE	A	612	50.125	-0.891	56.383	1.00	14.11
ATOM	3448	C	ILE	A	612	52.477	3.512	55.577	1.00	12.77
ATOM	3449	O	ILE	A	612	52.646	3.917	54.420	1.00	22.07
ATOM	3450	N	PRO	A	613	52.220	4.338	56.576	1.00	13.14



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ATOM	3451	CD	PRO A 613	52.041	3.940	57.993	1.00	17.04
ATOM	3452	CA	PRO A 613	52.098	5.777	56.405	1.00	10.48
ATOM	3453	CB	PRO A 613	52.394	6.328	57.792	1.00	14.10
ATOM	3454	CG	PRO A 613	52.064	5.240	58.752	1.00	15.78
ATOM	3455	C	PRO A 613	53.060	6.309	55.361	1.00	10.29
ATOM	3456	O	PRO A 613	52.661	6.746	54.273	1.00	13.06
ATOM	3457	N	ALA A 614	54.360	6.156	55.618	1.00	3.37
ATOM	3458	CA	ALA A 614	55.406	6.596	54.708	1.00	2.00
ATOM	3459	CB	ALA A 614	56.779	6.336	55.311	1.00	2.00
ATOM	3460	C	ALA A 614	55.323	5.963	53.326	1.00	2.00
ATOM	3461	O	ALA A 614	55.768	6.574	52.348	1.00	19.69
ATOM	3462	N	LYS A 615	54.786	4.753	53.210	1.00	6.69
ATOM	3463	CA	LYS A 615	54.606	4.098	51.921	1.00	14.60
ATOM	3464	CB	LYS A 615	54.229	2.625	52.116	1.00	12.21
ATOM	3465	CG	LYS A 615	55.401	1.825	52.662	1.00	15.71
ATOM	3466	CD	LYS A 615	55.420	0.395	52.149	1.00	15.47
ATOM	3467	CE	LYS A 615	56.832	-0.007	51.748	1.00	19.47
ATOM	3468	NZ	LYS A 615	57.841	0.442	52.749	1.00	24.26
ATOM	3469	C	LYS A 615	53.526	4.818	51.111	1.00	20.80
ATOM	3470	O	LYS A 615	53.640	5.060	49.904	1.00	17.49
ATOM	3471	N	ILE A 616	52.468	5.199	51.833	1.00	13.59
ATOM	3472	CA	ILE A 616	51.375	5.954	51.229	1.00	11.36
ATOM	3473	CB	ILE A 616	50.172	6.065	52.176	1.00	8.54
ATOM	3474	CG2	ILE A 616	49.159	7.085	51.680	1.00	2.00
ATOM	3475	CG1	ILE A 616	49.528	4.680	52.329	1.00	2.00
ATOM	3476	CD1	ILE A 616	48.479	4.592	53.416	1.00	2.00
ATOM	3477	C	ILE A 616	51.907	7.319	50.810	1.00	15.90
ATOM	3478	O	ILE A 616	51.619	7.742	49.682	1.00	17.93
ATOM	3479	N	LEU A 617	52.739	7.952	51.652	1.00	8.49
ATOM	3480	CA	LEU A 617	53.295	9.244	51.232	1.00	10.59
ATOM	3481	CB	LEU A 617	54.308	9.806	52.222	1.00	7.23
ATOM	3482	CG	LEU A 617	54.388	11.341	52.267	1.00	12.77
ATOM	3483	CD1	LEU A 617	55.211	11.818	53.454	1.00	9.72
ATOM	3484	CD2	LEU A 617	54.926	11.900	50.953	1.00	2.00
ATOM	3485	C	LEU A 617	53.894	9.056	49.841	1.00	18.20
ATOM	3486	O	LEU A 617	53.474	9.683	48.866	1.00	22.38
ATOM	3487	N	SER A 618	54.803	8.089	49.714	1.00	21.93
ATOM	3488	CA	SER A 618	55.455	7.736	48.465	1.00	19.22
ATOM	3489	CB	SER A 618	56.331	6.493	48.645	1.00	20.16
ATOM	3490	OG	SER A 618	57.579	6.821	49.237	1.00	30.07
ATOM	3491	C	SER A 618	54.476	7.512	47.320	1.00	19.95
ATOM	3492	O	SER A 618	54.764	7.900	46.183	1.00	16.19
ATOM	3493	N	TYR A 619	53.340	6.876	47.594	1.00	22.01
ATOM	3494	CA	TYR A 619	52.332	6.660	46.553	1.00	15.67
ATOM	3495	CB	TYR A 619	51.283	5.684	47.045	1.00	10.95
ATOM	3496	CG	TYR A 619	50.182	5.298	46.094	1.00	11.81
ATOM	3497	CD1	TYR A 619	50.307	4.219	45.233	1.00	18.30
ATOM	3498	CE1	TYR A 619	49.278	3.865	44.376	1.00	23.07
ATOM	3499	CD2	TYR A 619	48.987	6.005	46.074	1.00	18.53
ATOM	3500	CE2	TYR A 619	47.951	5.660	45.226	1.00	19.79
ATOM	3501	CZ	TYR A 619	48.105	4.586	44.376	1.00	19.90
ATOM	3502	OH	TYR A 619	47.081	4.246	43.524	1.00	17.99
ATOM	3503	C	TYR A 619	51.753	8.002	46.122	1.00	13.09
ATOM	3504	O	TYR A 619	51.815	8.324	44.928	1.00	16.86
ATOM	3505	N	ASN A 620	51.291	8.839	47.053	1.00	2.00
ATOM	3506	CA	ASN A 620	50.743	10.139	46.665	1.00	7.75
ATOM	3507	CB	ASN A 620	50.261	10.994	47.830	1.00	3.39
ATOM	3508	CG	ASN A 620	49.228	10.283	48.683	1.00	14.60
ATOM	3509	OD1	ASN A 620	49.474	10.075	49.875	1.00	16.30
ATOM	3510	ND2	ASN A 620	48.112	9.914	48.069	1.00	9.65
ATOM	3511	C	ASN A 620	51.777	10.914	45.858	1.00	11.51
ATOM	3512	O	ASN A 620	51.453	11.322	44.739	1.00	10.44
ATOM	3513	N	ARG A 621	53.018	11.022	46.343	1.00	13.54

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ATOM	3514	CA	ARG	A	621	54.048	11.721	45.575	1.00	13.31
ATOM	3515	CB	ARG	A	621	55.423	11.654	46.241	1.00	15.82
ATOM	3516	CG	ARG	A	621	55.502	12.596	47.434	1.00	28.89
ATOM	3517	CD	ARG	A	621	56.882	13.160	47.686	1.00	34.45
ATOM	3518	NE	ARG	A	621	57.728	12.309	48.516	1.00	39.29
ATOM	3519	CZ	ARG	A	621	58.356	12.727	49.614	1.00	39.25
ATOM	3520	NH1	ARG	A	621	58.231	13.979	50.040	1.00	42.64
ATOM	3521	NH2	ARG	A	621	59.103	11.878	50.308	1.00	34.49
ATOM	3522	C	ARG	A	621	54.097	11.229	44.136	1.00	13.36
ATOM	3523	O	ARG	A	621	54.153	12.047	43.217	1.00	12.37
ATOM	3524	N	ALA	A	622	54.032	9.921	43.917	1.00	18.03
ATOM	3525	CA	ALA	A	622	53.991	9.336	42.584	1.00	16.01
ATOM	3526	CB	ALA	A	622	53.833	7.825	42.710	1.00	14.32
ATOM	3527	C	ALA	A	622	52.819	9.921	41.800	1.00	15.18
ATOM	3528	O	ALA	A	622	52.966	10.519	40.736	1.00	2.00
ATOM	3529	N	ASN	A	623	51.635	9.776	42.395	1.00	20.93
ATOM	3530	CA	ASN	A	623	50.387	10.294	41.841	1.00	22.22
ATOM	3531	CB	ASN	A	623	49.263	10.149	42.865	1.00	17.76
ATOM	3532	CG	ASN	A	623	47.872	10.013	42.298	1.00	13.44
ATOM	3533	OD1	ASN	A	623	46.926	9.763	43.051	1.00	11.76
ATOM	3534	ND2	ASN	A	623	47.728	10.164	40.988	1.00	17.29
ATOM	3535	C	ASN	A	623	50.562	11.766	41.481	1.00	22.05
ATOM	3536	O	ASN	A	623	50.411	12.186	40.338	1.00	28.32
ATOM	3537	N	ARG	A	624	50.958	12.545	42.481	1.00	13.94
ATOM	3538	CA	ARG	A	624	51.235	13.967	42.342	1.00	12.81
ATOM	3539	CB	ARG	A	624	52.031	14.420	43.570	1.00	15.50
ATOM	3540	CG	ARG	A	624	51.910	15.888	43.937	1.00	19.01
ATOM	3541	CD	ARG	A	624	52.157	16.042	45.435	1.00	30.49
ATOM	3542	NE	ARG	A	624	51.046	15.529	46.230	1.00	31.06
ATOM	3543	CZ	ARG	A	624	51.160	14.946	47.418	1.00	35.26
ATOM	3544	NH1	ARG	A	624	52.345	14.767	47.989	1.00	28.82
ATOM	3545	NH2	ARG	A	624	50.073	14.519	48.054	1.00	40.97
ATOM	3546	C	ARG	A	624	51.989	14.263	41.058	1.00	9.43
ATOM	3547	O	ARG	A	624	51.534	15.066	40.241	1.00	7.24
ATOM	3548	N	ALA	A	625	53.116	13.595	40.824	1.00	12.69
ATOM	3549	CA	ALA	A	625	53.929	13.766	39.629	1.00	17.15
ATOM	3550	CB	ALA	A	625	55.121	12.820	39.660	1.00	15.93
ATOM	3551	C	ALA	A	625	53.108	13.560	38.359	1.00	19.95
ATOM	3552	O	ALA	A	625	53.281	14.276	37.369	1.00	24.18
ATOM	3553	N	VAL	A	626	52.210	12.577	38.388	1.00	19.48
ATOM	3554	CA	VAL	A	626	51.315	12.341	37.259	1.00	16.31
ATOM	3555	CB	VAL	A	626	50.546	11.022	37.416	1.00	2.00
ATOM	3556	CG1	VAL	A	626	49.764	10.728	36.146	1.00	2.00
ATOM	3557	CG2	VAL	A	626	51.519	9.896	37.750	1.00	2.00
ATOM	3558	C	VAL	A	626	50.358	13.524	37.137	1.00	14.55
ATOM	3559	O	VAL	A	626	50.265	14.153	36.085	1.00	20.06
ATOM	3560	N	ALA	A	627	49.707	13.874	38.241	1.00	8.79
ATOM	3561	CA	ALA	A	627	48.791	15.007	38.277	1.00	10.13
ATOM	3562	CB	ALA	A	627	48.363	15.258	39.714	1.00	6.06
ATOM	3563	C	ALA	A	627	49.404	16.255	37.659	1.00	14.68
ATOM	3564	O	ALA	A	627	48.840	16.769	36.682	1.00	13.29
ATOM	3565	N	ILE	A	628	50.573	16.706	38.125	1.00	11.78
ATOM	3566	CA	ILE	A	628	51.215	17.888	37.557	1.00	10.38
ATOM	3567	CB	ILE	A	628	52.576	18.212	38.186	1.00	12.61
ATOM	3568	CG2	ILE	A	628	53.339	19.294	37.433	1.00	11.83
ATOM	3569	CG1	ILE	A	628	52.394	18.655	39.642	1.00	19.27
ATOM	3570	CD1	ILE	A	628	53.052	17.708	40.620	1.00	13.56
ATOM	3571	C	ILE	A	628	51.399	17.730	36.049	1.00	11.57
ATOM	3572	O	ILE	A	628	51.203	18.650	35.254	1.00	8.35
ATOM	3573	N	LEU	A	629	51.812	16.528	35.656	1.00	11.43
ATOM	3574	CA	LEU	A	629	52.016	16.193	34.256	1.00	11.41
ATOM	3575	CB	LEU	A	629	52.465	14.731	34.146	1.00	2.00
ATOM	3576	CG	LEU	A	629	52.866	14.239	32.754	1.00	13.90

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ATOM	3577	CD1	LEU	A	629	53.942	13.168	32.839	1.00	17.12
ATOM	3578	CD2	LEU	A	629	51.650	13.697	32.014	1.00	11.45
ATOM	3579	C	LEU	A	629	50.753	16.444	33.446	1.00	8.41
ATOM	3580	O	LEU	A	629	50.828	17.040	32.370	1.00	12.20
ATOM	3581	N	CYS	A	630	49.600	16.022	33.958	1.00	12.38
ATOM	3582	CA	CYS	A	630	48.322	16.176	33.287	1.00	16.89
ATOM	3583	CB	CYS	A	630	47.335	15.099	33.768	1.00	10.22
ATOM	3584	SG	CYS	A	630	48.000	13.421	33.826	1.00	22.91
ATOM	3585	C	CYS	A	630	47.651	17.528	33.491	1.00	19.00
ATOM	3586	O	CYS	A	630	46.564	17.761	32.952	1.00	30.15
ATOM	3587	N	ASN	A	631	48.237	18.412	34.275	1.00	14.85
ATOM	3588	CA	ASN	A	631	47.672	19.712	34.574	1.00	11.67
ATOM	3589	CB	ASN	A	631	47.648	20.655	33.370	1.00	14.97
ATOM	3590	CG	ASN	A	631	47.683	22.120	33.773	1.00	21.98
ATOM	3591	OD1	ASN	A	631	47.199	22.998	33.053	1.00	25.15
ATOM	3592	ND2	ASN	A	631	48.267	22.405	34.934	1.00	18.54
ATOM	3593	C	ASN	A	631	46.281	19.575	35.188	1.00	9.45
ATOM	3594	O	ASN	A	631	45.311	20.140	34.688	1.00	13.75
ATOM	3595	N	HIS	A	632	46.172	18.855	36.303	1.00	2.00
ATOM	3596	CA	HIS	A	632	44.951	18.714	37.075	1.00	2.71
ATOM	3597	CB	HIS	A	632	44.639	17.295	37.556	1.00	2.00
ATOM	3598	CG	HIS	A	632	44.325	16.372	36.416	1.00	4.17
ATOM	3599	CD2	HIS	A	632	43.867	16.626	35.168	1.00	3.25
ATOM	3600	ND1	HIS	A	632	44.501	15.007	36.488	1.00	5.04
ATOM	3601	CE1	HIS	A	632	44.160	14.466	35.329	1.00	2.00
ATOM	3602	NE2	HIS	A	632	43.764	15.424	34.510	1.00	2.00
ATOM	3603	C	HIS	A	632	45.097	19.608	38.317	1.00	5.94
ATOM	3604	O	HIS	A	632	44.866	19.175	39.443	1.00	4.03
ATOM	3605	N	GLN	A	633	45.489	20.852	38.077	1.00	9.26
ATOM	3606	CA	GLN	A	633	45.709	21.827	39.125	1.00	22.70
ATOM	3607	CB	GLN	A	633	46.228	23.160	38.567	1.00	27.26
ATOM	3608	CG	GLN	A	633	47.725	23.168	38.285	1.00	38.27
ATOM	3609	CD	GLN	A	633	48.149	24.404	37.513	1.00	45.27
ATOM	3610	OE1	GLN	A	633	47.391	24.900	36.673	1.00	39.34
ATOM	3611	NE2	GLN	A	633	49.356	24.893	37.790	1.00	48.84
ATOM	3612	C	GLN	A	633	44.472	22.102	39.973	1.00	23.57
ATOM	3613	O	GLN	A	633	43.353	21.664	39.720	1.00	15.45
ATOM	3614	N	GLN	A	634	44.724	22.876	41.028	1.00	29.15
ATOM	3615	CA	GLN	A	634	43.677	23.260	41.971	1.00	39.16
ATOM	3616	CB	GLN	A	634	43.429	22.123	42.959	1.00	37.61
ATOM	3617	CG	GLN	A	634	42.508	22.440	44.120	1.00	40.35
ATOM	3618	CD	GLN	A	634	42.751	21.550	45.324	1.00	46.19
ATOM	3619	OE1	GLN	A	634	43.773	20.869	45.435	1.00	43.09
ATOM	3620	NE2	GLN	A	634	41.797	21.558	46.253	1.00	50.89
ATOM	3621	C	GLN	A	634	44.053	24.555	42.688	1.00	39.00
ATOM	3622	O	GLN	A	634	45.226	24.817	42.975	1.00	37.11
ATOM	3623	N	ALA	A	635	43.046	25.384	42.956	1.00	33.95
ATOM	3624	CA	ALA	A	635	43.287	26.637	43.669	1.00	31.84
ATOM	3625	CB	ALA	A	635	42.346	27.741	43.228	1.00	35.32
ATOM	3626	C	ALA	A	635	43.134	26.373	45.167	1.00	31.52
ATOM	3627	O	ALA	A	635	42.201	25.704	45.609	1.00	28.75
ATOM	3628	N	PRO	A	636	44.084	26.883	45.937	1.00	33.92
ATOM	3629	CD	PRO	A	636	45.235	27.695	45.473	1.00	36.64
ATOM	3630	CA	PRO	A	636	44.095	26.729	47.381	1.00	33.77
ATOM	3631	CB	PRO	A	636	44.885	27.956	47.832	1.00	35.80
ATOM	3632	CG	PRO	A	636	45.878	28.179	46.745	1.00	35.15
ATOM	3633	C	PRO	A	636	42.702	26.683	47.972	1.00	32.86
ATOM	3634	O	PRO	A	636	41.924	27.635	47.878	1.00	34.37
ATOM	3635	N	PRO	A	637	42.350	25.549	48.567	1.00	33.26
ATOM	3636	CD	PRO	A	637	43.216	24.348	48.688	1.00	28.22
ATOM	3637	CA	PRO	A	637	41.040	25.337	49.162	1.00	36.67
ATOM	3638	CB	PRO	A	637	41.201	24.033	49.935	1.00	34.68
ATOM	3639	CG	PRO	A	637	42.257	23.294	49.181	1.00	35.20

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ATOM	3640	C	PRO	A	637	40.568	26.487	50.032	1.00	40.63
ATOM	3641	O	PRO	A	637	40.835	26.577	51.228	1.00	41.99
ATOM	3642	N	LYS	A	638	39.821	27.397	49.419	1.00	43.63
ATOM	3643	CA	LYS	A	638	39.249	28.588	50.005	1.00	42.53
ATOM	3644	CB	LYS	A	638	37.813	28.321	50.494	1.00	40.32
ATOM	3645	CG	LYS	A	638	36.976	29.593	50.603	1.00	40.42
ATOM	3646	CD	LYS	A	638	36.712	30.173	49.221	1.00	42.91
ATOM	3647	CE	LYS	A	638	35.722	31.323	49.253	1.00	47.06
ATOM	3648	NZ	LYS	A	638	35.281	31.711	47.880	1.00	44.89
ATOM	3649	C	LYS	A	638	40.083	29.196	51.126	1.00	41.97
ATOM	3650	O	LYS	A	638	41.086	29.874	50.897	1.00	40.71
ATOM	3651	N	ALA	A	639	39.642	28.987	52.359	1.00	40.42
ATOM	3652	CA	ALA	A	639	40.313	29.486	53.549	1.00	36.67
ATOM	3653	CB	ALA	A	639	39.631	30.739	54.067	1.00	37.68
ATOM	3654	C	ALA	A	639	40.335	28.378	54.602	1.00	36.62
ATOM	3655	O	ALA	A	639	40.509	28.592	55.798	1.00	38.44
ATOM	3656	N	ALA	A	640	40.179	27.147	54.115	1.00	32.78
ATOM	3657	CA	ALA	A	640	40.200	25.954	54.953	1.00	32.13
ATOM	3658	CB	ALA	A	640	39.058	25.023	54.603	1.00	32.59
ATOM	3659	C	ALA	A	640	41.552	25.258	54.805	1.00	37.56
ATOM	3660	O	ALA	A	640	41.832	24.182	55.323	1.00	35.19
ATOM	3661	N	GLU	A	641	42.463	25.967	54.142	1.00	37.97
ATOM	3662	CA	GLU	A	641	43.842	25.588	53.915	1.00	36.76
ATOM	3663	CB	GLU	A	641	44.389	26.230	52.643	1.00	41.74
ATOM	3664	CG	GLU	A	641	45.232	25.363	51.736	1.00	41.89
ATOM	3665	CD	GLU	A	641	46.377	24.638	52.406	1.00	41.58
ATOM	3666	OE1	GLU	A	641	46.302	23.395	52.519	1.00	44.52
ATOM	3667	OE2	GLU	A	641	47.343	25.313	52.818	1.00	41.63
ATOM	3668	C	GLU	A	641	44.681	26.048	55.106	1.00	39.53
ATOM	3669	O	GLU	A	641	45.879	25.811	55.201	1.00	47.51
ATOM	3670	N	LYS	A	642	44.024	26.702	56.057	1.00	41.15
ATOM	3671	CA	LYS	A	642	44.585	27.160	57.310	1.00	44.59
ATOM	3672	CB	LYS	A	642	44.097	28.557	57.689	1.00	44.79
ATOM	3673	CG	LYS	A	642	44.833	29.700	57.003	1.00	41.57
ATOM	3674	CD	LYS	A	642	44.387	31.044	57.563	1.00	40.11
ATOM	3675	CE	LYS	A	642	45.298	32.169	57.102	1.00	40.44
ATOM	3676	NZ	LYS	A	642	46.702	31.981	57.565	1.00	42.35
ATOM	3677	C	LYS	A	642	44.264	26.156	58.420	1.00	43.27
ATOM	3678	O	LYS	A	642	44.360	26.417	59.616	1.00	44.27
ATOM	3679	N	SER	A	643	43.952	24.927	58.009	1.00	39.18
ATOM	3680	CA	SER	A	643	43.705	23.786	58.870	1.00	36.97
ATOM	3681	CB	SER	A	643	42.696	22.803	58.283	1.00	34.78
ATOM	3682	OG	SER	A	643	43.344	21.765	57.563	1.00	36.11
ATOM	3683	C	SER	A	643	45.034	23.056	59.099	1.00	36.59
ATOM	3684	O	SER	A	643	45.191	22.093	59.837	1.00	34.40
ATOM	3685	N	MET	A	644	46.065	23.586	58.454	1.00	37.35
ATOM	3686	CA	MET	A	644	47.451	23.183	58.530	1.00	42.26
ATOM	3687	CB	MET	A	644	48.227	23.858	57.398	1.00	42.33
ATOM	3688	CG	MET	A	644	49.533	23.198	57.007	1.00	44.05
ATOM	3689	SD	MET	A	644	49.333	21.622	56.167	1.00	52.95
ATOM	3690	CE	MET	A	644	48.238	22.063	54.817	1.00	49.92
ATOM	3691	C	MET	A	644	48.020	23.597	59.888	1.00	41.70
ATOM	3692	O	MET	A	644	48.956	23.019	60.432	1.00	42.92
ATOM	3693	N	MET	A	645	47.400	24.614	60.474	1.00	41.46
ATOM	3694	CA	MET	A	645	47.711	25.143	61.791	1.00	42.36
ATOM	3695	CB	MET	A	645	47.157	26.571	61.912	1.00	44.55
ATOM	3696	CG	MET	A	645	47.168	27.303	60.577	1.00	48.96
ATOM	3697	SD	MET	A	645	46.853	29.065	60.598	1.00	58.38
ATOM	3698	CE	MET	A	645	48.520	29.721	60.693	1.00	49.46
ATOM	3699	C	MET	A	645	47.158	24.197	62.852	1.00	42.38
ATOM	3700	O	MET	A	645	47.718	24.080	63.942	1.00	41.72
ATOM	3701	N	ASN	A	646	46.097	23.460	62.521	1.00	43.62
ATOM	3702	CA	ASN	A	646	45.504	22.472	63.409	1.00	44.97

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ATOM	3703	CB	ASN	A	646	44.115	22.039	62.937	1.00	49.76
ATOM	3704	CG	ASN	A	646	43.116	23.169	62.821	1.00	54.89
ATOM	3705	OD1	ASN	A	646	43.236	24.201	63.485	1.00	59.96
ATOM	3706	ND2	ASN	A	646	42.110	22.986	61.970	1.00	54.56
ATOM	3707	C	ASN	A	646	46.407	21.241	63.507	1.00	41.47
ATOM	3708	O	ASN	A	646	46.505	20.622	64.564	1.00	43.17
ATOM	3709	N	LEU	A	647	47.050	20.887	62.401	1.00	37.63
ATOM	3710	CA	LEU	A	647	47.965	19.755	62.352	1.00	39.40
ATOM	3711	CB	LEU	A	647	48.220	19.341	60.901	1.00	36.93
ATOM	3712	CG	LEU	A	647	47.090	18.666	60.130	1.00	30.60
ATOM	3713	CD1	LEU	A	647	47.491	18.462	58.677	1.00	33.03
ATOM	3714	CD2	LEU	A	647	46.725	17.327	60.753	1.00	28.86
ATOM	3715	C	LEU	A	647	49.290	20.075	63.043	1.00	40.87
ATOM	3716	O	LEU	A	647	50.361	20.166	62.439	1.00	41.46
ATOM	3717	N	GLU	A	702	53.729	14.095	61.123	1.00	26.14
ATOM	3718	CA	GLU	A	702	54.610	14.811	60.201	1.00	30.75
ATOM	3719	CB	GLU	A	702	56.075	14.667	60.625	1.00	35.33
ATOM	3720	CG	GLU	A	702	56.322	15.097	62.065	1.00	41.98
ATOM	3721	CD	GLU	A	702	57.767	15.077	62.512	1.00	45.48
ATOM	3722	OE1	GLU	A	702	58.319	13.986	62.780	1.00	50.19
ATOM	3723	OE2	GLU	A	702	58.377	16.167	62.615	1.00	40.81
ATOM	3724	C	GLU	A	702	54.371	14.324	58.779	1.00	29.31
ATOM	3725	O	GLU	A	702	54.173	15.124	57.862	1.00	25.97
ATOM	3726	N	VAL	A	703	54.312	13.005	58.604	1.00	30.12
ATOM	3727	CA	VAL	A	703	54.047	12.407	57.296	1.00	32.02
ATOM	3728	CB	VAL	A	703	53.859	10.883	57.406	1.00	34.73
ATOM	3729	CG1	VAL	A	703	53.522	10.255	56.060	1.00	32.77
ATOM	3730	CG2	VAL	A	703	55.111	10.248	58.005	1.00	34.68
ATOM	3731	C	VAL	A	703	52.803	13.037	56.677	1.00	33.19
ATOM	3732	O	VAL	A	703	52.844	13.599	55.582	1.00	39.92
ATOM	3733	N	GLN	A	704	51.693	12.971	57.409	1.00	29.93
ATOM	3734	CA	GLN	A	704	50.442	13.581	56.970	1.00	34.36
ATOM	3735	CB	GLN	A	704	49.362	13.414	58.044	1.00	39.34
ATOM	3736	CG	GLN	A	704	48.883	11.974	58.173	1.00	45.44
ATOM	3737	CD	GLN	A	704	48.128	11.691	59.454	1.00	49.23
ATOM	3738	OE1	GLN	A	704	48.659	11.053	60.368	1.00	51.23
ATOM	3739	NE2	GLN	A	704	46.884	12.157	59.527	1.00	49.82
ATOM	3740	C	GLN	A	704	50.664	15.048	56.623	1.00	33.18
ATOM	3741	O	GLN	A	704	50.299	15.481	55.526	1.00	34.83
ATOM	3742	N	ALA	A	705	51.298	15.803	57.519	1.00	29.55
ATOM	3743	CA	ALA	A	705	51.611	17.204	57.261	1.00	27.99
ATOM	3744	CB	ALA	A	705	52.579	17.740	58.307	1.00	29.45
ATOM	3745	C	ALA	A	705	52.200	17.381	55.865	1.00	26.97
ATOM	3746	O	ALA	A	705	51.604	18.025	54.996	1.00	24.11
ATOM	3747	N	THR	A	706	53.345	16.752	55.604	1.00	22.70
ATOM	3748	CA	THR	A	706	54.002	16.817	54.305	1.00	28.24
ATOM	3749	CB	THR	A	706	55.193	15.842	54.208	1.00	30.51
ATOM	3750	OG1	THR	A	706	56.203	16.202	55.162	1.00	33.64
ATOM	3751	CG2	THR	A	706	55.820	15.867	52.819	1.00	29.88
ATOM	3752	C	THR	A	706	53.041	16.517	53.158	1.00	30.75
ATOM	3753	O	THR	A	706	53.033	17.216	52.141	1.00	30.07
ATOM	3754	N	ASP	A	707	52.270	15.442	53.298	1.00	32.21
ATOM	3755	CA	ASP	A	707	51.301	15.060	52.282	1.00	36.21
ATOM	3756	CB	ASP	A	707	50.446	13.888	52.765	1.00	32.27
ATOM	3757	CG	ASP	A	707	49.987	12.984	51.636	1.00	27.17
ATOM	3758	OD1	ASP	A	707	49.387	11.930	51.944	1.00	34.14
ATOM	3759	OD2	ASP	A	707	50.223	13.304	50.453	1.00	13.16
ATOM	3760	C	ASP	A	707	50.414	16.244	51.907	1.00	37.68
ATOM	3761	O	ASP	A	707	50.416	16.659	50.744	1.00	42.95
ATOM	3762	N	ARG	A	708	49.684	16.804	52.869	1.00	34.36
ATOM	3763	CA	ARG	A	708	48.814	17.940	52.577	1.00	38.15
ATOM	3764	CB	ARG	A	708	48.124	18.443	53.843	1.00	34.32
ATOM	3765	CG	ARG	A	708	46.926	17.603	54.276	1.00	31.07

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ATOM	3766	CD	ARG	A	708	46.355	18.209	55.550	1.00	32.92
ATOM	3767	NE	ARG	A	708	45.163	17.552	56.054	1.00	31.62
ATOM	3768	CZ	ARG	A	708	43.992	17.528	55.425	1.00	33.95
ATOM	3769	NH1	ARG	A	708	42.975	16.892	55.997	1.00	34.73
ATOM	3770	NH2	ARG	A	708	43.848	18.127	54.250	1.00	32.59
ATOM	3771	C	ARG	A	708	49.544	19.090	51.894	1.00	39.28
ATOM	3772	O	ARG	A	708	49.166	19.504	50.795	1.00	37.02
ATOM	3773	N	GLU	A	709	50.594	19.611	52.515	1.00	41.14
ATOM	3774	CA	GLU	A	709	51.383	20.710	51.984	1.00	41.00
ATOM	3775	CB	GLU	A	709	52.654	20.896	52.828	1.00	36.23
ATOM	3776	CG	GLU	A	709	52.405	21.608	54.148	1.00	41.29
ATOM	3777	CD	GLU	A	709	52.070	23.074	53.950	1.00	44.12
ATOM	3778	OE1	GLU	A	709	52.997	23.884	53.740	1.00	44.47
ATOM	3779	OE2	GLU	A	709	50.871	23.415	53.998	1.00	50.01
ATOM	3780	C	GLU	A	709	51.777	20.587	50.520	1.00	41.82
ATOM	3781	O	GLU	A	709	51.628	21.556	49.762	1.00	45.03
ATOM	3782	N	GLU	A	710	52.272	19.432	50.086	1.00	37.79
ATOM	3783	CA	GLU	A	710	52.680	19.213	48.710	1.00	42.10
ATOM	3784	CB	GLU	A	710	53.565	17.964	48.599	1.00	42.70
ATOM	3785	CG	GLU	A	710	54.802	17.960	49.474	1.00	44.41
ATOM	3786	CD	GLU	A	710	55.605	16.678	49.344	1.00	44.81
ATOM	3787	OE1	GLU	A	710	56.842	16.743	49.511	1.00	43.13
ATOM	3788	OE2	GLU	A	710	55.007	15.615	49.077	1.00	47.70
ATOM	3789	C	GLU	A	710	51.522	19.024	47.732	1.00	43.86
ATOM	3790	O	GLU	A	710	51.728	19.065	46.516	1.00	44.01
ATOM	3791	N	ASN	A	711	50.324	18.779	48.239	1.00	42.15
ATOM	3792	CA	ASN	A	711	49.132	18.543	47.434	1.00	38.42
ATOM	3793	CB	ASN	A	711	48.515	17.228	47.922	1.00	40.67
ATOM	3794	CG	ASN	A	711	47.396	16.663	47.084	1.00	42.23
ATOM	3795	OD1	ASN	A	711	47.597	16.080	46.016	1.00	48.84
ATOM	3796	ND2	ASN	A	711	46.171	16.833	47.572	1.00	32.77
ATOM	3797	C	ASN	A	711	48.141	19.695	47.547	1.00	35.48
ATOM	3798	O	ASN	A	711	46.958	19.572	47.229	1.00	30.54
ATOM	3799	N	LYS	A	712	48.624	20.853	47.990	1.00	34.87
ATOM	3800	CA	LYS	A	712	47.821	22.046	48.201	1.00	32.62
ATOM	3801	CB	LYS	A	712	48.668	23.131	48.886	1.00	35.75
ATOM	3802	CG	LYS	A	712	47.962	24.462	49.091	1.00	38.22
ATOM	3803	CD	LYS	A	712	48.775	25.410	49.957	1.00	40.50
ATOM	3804	CE	LYS	A	712	50.042	25.893	49.274	1.00	39.32
ATOM	3805	NZ	LYS	A	712	49.753	26.627	48.009	1.00	41.36
ATOM	3806	C	LYS	A	712	47.169	22.624	46.955	1.00	24.32
ATOM	3807	O	LYS	A	712	46.041	23.113	47.055	1.00	24.29
ATOM	3808	N	GLN	A	713	47.845	22.631	45.815	1.00	26.46
ATOM	3809	CA	GLN	A	713	47.249	23.173	44.599	1.00	32.18
ATOM	3810	CB	GLN	A	713	48.105	24.305	44.033	1.00	37.71
ATOM	3811	CG	GLN	A	713	48.205	25.539	44.909	1.00	43.46
ATOM	3812	CD	GLN	A	713	49.309	26.478	44.461	1.00	43.50
ATOM	3813	OE1	GLN	A	713	49.888	26.310	43.386	1.00	49.42
ATOM	3814	NE2	GLN	A	713	49.609	27.474	45.288	1.00	43.33
ATOM	3815	C	GLN	A	713	47.064	22.108	43.525	1.00	35.30
ATOM	3816	O	GLN	A	713	46.860	22.450	42.356	1.00	36.76
ATOM	3817	N	ILE	A	714	47.140	20.834	43.887	1.00	32.46
ATOM	3818	CA	ILE	A	714	47.006	19.744	42.937	1.00	19.82
ATOM	3819	CB	ILE	A	714	48.247	18.829	42.964	1.00	23.48
ATOM	3820	CG2	ILE	A	714	48.163	17.780	41.864	1.00	26.21
ATOM	3821	CG1	ILE	A	714	49.554	19.611	42.848	1.00	26.42
ATOM	3822	CD1	ILE	A	714	49.714	20.455	41.607	1.00	22.00
ATOM	3823	C	ILE	A	714	45.807	18.858	43.259	1.00	20.48
ATOM	3824	O	ILE	A	714	45.504	18.643	44.431	1.00	25.69
ATOM	3825	N	ALA	A	715	45.183	18.326	42.215	1.00	19.26
ATOM	3826	CA	ALA	A	715	44.067	17.402	42.400	1.00	20.24
ATOM	3827	CB	ALA	A	715	42.834	17.866	41.648	1.00	23.90
ATOM	3828	C	ALA	A	715	44.523	16.029	41.905	1.00	20.92

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ATOM	3829	O	ALA	A	715	44.917	15.925	40.740	1.00	27.42
ATOM	3830	N	LEU	A	716	44.503	15.018	42.763	1.00	13.58
ATOM	3831	CA	LEU	A	716	44.909	13.675	42.346	1.00	10.27
ATOM	3832	CB	LEU	A	716	45.449	12.900	43.547	1.00	18.07
ATOM	3833	CG	LEU	A	716	46.522	13.590	44.397	1.00	11.20
ATOM	3834	CD1	LEU	A	716	46.571	12.995	45.797	1.00	2.00
ATOM	3835	CD2	LEU	A	716	47.898	13.489	43.752	1.00	12.74
ATOM	3836	C	LEU	A	716	43.748	12.934	41.691	1.00	16.85
ATOM	3837	O	LEU	A	716	43.907	12.179	40.731	1.00	15.57
ATOM	3838	N	GLY	A	717	42.538	13.156	42.186	1.00	21.69
ATOM	3839	CA	GLY	A	717	41.314	12.564	41.721	1.00	19.93
ATOM	3840	C	GLY	A	717	41.242	12.106	40.281	1.00	15.46
ATOM	3841	O	GLY	A	717	41.252	10.894	40.043	1.00	21.56
ATOM	3842	N	THR	A	718	41.129	13.034	39.334	1.00	6.31
ATOM	3843	CA	THR	A	718	41.019	12.682	37.919	1.00	2.00
ATOM	3844	CB	THR	A	718	41.212	13.872	36.979	1.00	2.57
ATOM	3845	OG1	THR	A	718	40.332	14.943	37.358	1.00	4.37
ATOM	3846	CG2	THR	A	718	40.920	13.483	35.536	1.00	2.00
ATOM	3847	C	THR	A	718	41.958	11.543	37.550	1.00	11.09
ATOM	3848	O	THR	A	718	41.471	10.422	37.353	1.00	16.13
ATOM	3849	N	SER	A	719	43.263	11.795	37.520	1.00	8.76
ATOM	3850	CA	SER	A	719	44.238	10.761	37.178	1.00	6.82
ATOM	3851	CB	SER	A	719	45.646	11.274	37.478	1.00	6.62
ATOM	3852	OG	SER	A	719	45.590	12.040	38.668	1.00	2.00
ATOM	3853	C	SER	A	719	43.965	9.457	37.904	1.00	8.71
ATOM	3854	O	SER	A	719	43.735	8.414	37.286	1.00	7.77
ATOM	3855	N	LYS	A	720	43.918	9.480	39.230	1.00	3.42
ATOM	3856	CA	LYS	A	720	43.618	8.290	40.018	1.00	8.83
ATOM	3857	CB	LYS	A	720	43.156	8.731	41.409	1.00	10.32
ATOM	3858	CG	LYS	A	720	42.986	7.608	42.414	1.00	6.06
ATOM	3859	CD	LYS	A	720	42.828	8.182	43.821	1.00	9.36
ATOM	3860	CE	LYS	A	720	43.004	7.076	44.852	1.00	18.98
ATOM	3861	NZ	LYS	A	720	44.269	6.320	44.594	1.00	19.63
ATOM	3862	C	LYS	A	720	42.563	7.400	39.372	1.00	10.55
ATOM	3863	O	LYS	A	720	42.835	6.224	39.115	1.00	13.32
ATOM	3864	N	LEU	A	721	41.377	7.931	39.097	1.00	9.33
ATOM	3865	CA	LEU	A	721	40.294	7.184	38.495	1.00	12.53
ATOM	3866	CB	LEU	A	721	38.950	7.859	38.821	1.00	12.36
ATOM	3867	CG	LEU	A	721	38.371	7.659	40.220	1.00	10.25
ATOM	3868	CD1	LEU	A	721	37.413	8.797	40.546	1.00	6.46
ATOM	3869	CD2	LEU	A	721	37.650	6.323	40.330	1.00	2.00
ATOM	3870	C	LEU	A	721	40.328	7.020	36.982	1.00	14.07
ATOM	3871	O	LEU	A	721	40.027	5.919	36.505	1.00	25.76
ATOM	3872	N	ASN	A	722	40.607	8.075	36.232	1.00	2.00
ATOM	3873	CA	ASN	A	722	40.555	8.003	34.770	1.00	2.00
ATOM	3874	CB	ASN	A	722	40.077	9.370	34.263	1.00	2.00
ATOM	3875	CG	ASN	A	722	38.697	9.752	34.767	1.00	2.00
ATOM	3876	OD1	ASN	A	722	37.758	9.835	33.970	1.00	9.15
ATOM	3877	ND2	ASN	A	722	38.533	9.993	36.065	1.00	4.55
ATOM	3878	C	ASN	A	722	41.837	7.558	34.098	1.00	4.76
ATOM	3879	O	ASN	A	722	41.824	6.665	33.244	1.00	2.00
ATOM	3880	N	TYR	A	723	42.954	8.181	34.443	1.00	2.00
ATOM	3881	CA	TYR	A	723	44.263	7.807	33.877	1.00	7.43
ATOM	3882	CB	TYR	A	723	45.087	9.099	33.787	1.00	7.67
ATOM	3883	CG	TYR	A	723	44.286	10.127	32.997	1.00	6.90
ATOM	3884	CD1	TYR	A	723	43.611	11.162	33.620	1.00	12.23
ATOM	3885	CE1	TYR	A	723	42.866	12.074	32.890	1.00	12.58
ATOM	3886	CD2	TYR	A	723	44.171	9.999	31.621	1.00	2.00
ATOM	3887	CE2	TYR	A	723	43.428	10.903	30.888	1.00	6.08
ATOM	3888	CZ	TYR	A	723	42.775	11.947	31.520	1.00	2.00
ATOM	3889	OH	TYR	A	723	42.041	12.812	30.757	1.00	2.00
ATOM	3890	C	TYR	A	723	44.825	6.717	34.764	1.00	9.25
ATOM	3891	O	TYR	A	723	44.019	6.213	35.571	1.00	19.23

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ATOM	3896	N	LEU	A	724	46.079	6.331	34.753	1.00	2.00
ATOM	3897	CA	LEU	A	724	46.646	5.317	35.621	1.00	3.74
ATOM	3898	CB	LEU	A	724	46.700	5.800	37.081	1.00	3.93
ATOM	3899	CG	LEU	A	724	47.167	7.207	37.428	1.00	2.00
ATOM	3900	CD1	LEU	A	724	47.631	7.274	38.876	1.00	2.00
ATOM	3901	CD2	LEU	A	724	48.239	7.729	36.487	1.00	2.00
ATOM	3902	C	LEU	A	724	45.957	3.956	35.630	1.00	6.79
ATOM	3903	O	LEU	A	724	44.816	3.782	36.054	1.00	2.00
ATOM	3904	N	ASP	A	725	46.687	2.921	35.212	1.00	2.00
ATOM	3905	CA	ASP	A	725	46.151	1.552	35.212	1.00	7.40
ATOM	3906	CB	ASP	A	725	47.070	0.678	34.373	1.00	5.60
ATOM	3907	CG	ASP	A	725	46.554	-0.717	34.097	1.00	12.78
ATOM	3908	OD1	ASP	A	725	45.919	-1.322	34.988	1.00	13.24
ATOM	3909	OD2	ASP	A	725	46.802	-1.216	32.974	1.00	7.24
ATOM	3910	C	ASP	A	725	46.040	1.080	36.652	1.00	7.87
ATOM	3911	O	ASP	A	725	46.989	1.198	37.427	1.00	18.42
ATOM	3912	N	PRO	A	726	44.889	0.564	37.060	1.00	10.53
ATOM	3913	CD	PRO	A	726	43.679	0.397	36.213	1.00	13.02
ATOM	3914	CA	PRO	A	726	44.649	0.110	38.419	1.00	12.90
ATOM	3915	CB	PRO	A	726	43.216	-0.397	38.425	1.00	2.00
ATOM	3916	CG	PRO	A	726	42.870	-0.614	36.991	1.00	10.84
ATOM	3917	C	PRO	A	726	45.586	-1.003	38.850	1.00	16.54
ATOM	3918	O	PRO	A	726	46.133	-1.006	39.955	1.00	21.73
ATOM	3919	N	ARG	A	727	45.795	-1.952	37.938	1.00	9.29
ATOM	3920	CA	ARG	A	727	46.708	-3.068	38.200	1.00	9.29
ATOM	3921	CB	ARG	A	727	46.817	-3.899	36.918	1.00	7.26
ATOM	3922	CG	ARG	A	727	45.459	-4.482	36.541	1.00	2.00
ATOM	3923	CD	ARG	A	727	45.388	-4.988	35.119	1.00	2.00
ATOM	3924	NE	ARG	A	727	45.486	-3.921	34.121	1.00	2.00
ATOM	3925	CZ	ARG	A	727	45.712	-4.225	32.838	1.00	3.99
ATOM	3926	NH1	ARG	A	727	45.842	-5.491	32.460	1.00	6.31
ATOM	3927	NH2	ARG	A	727	45.822	-3.272	31.926	1.00	2.00
ATOM	3928	C	ARG	A	727	48.013	-2.544	38.769	1.00	12.01
ATOM	3929	O	ARG	A	727	48.412	-2.993	39.852	1.00	17.76
ATOM	3930	N	ILE	A	728	48.658	-1.551	38.163	1.00	2.00
ATOM	3931	CA	ILE	A	728	49.851	-0.922	38.703	1.00	5.47
ATOM	3932	CB	ILE	A	728	50.071	0.473	38.079	1.00	4.28
ATOM	3933	CG2	ILE	A	728	51.141	1.252	38.830	1.00	2.00
ATOM	3934	CG1	ILE	A	728	50.418	0.337	36.595	1.00	4.07
ATOM	3935	CD1	ILE	A	728	50.499	1.661	35.869	1.00	2.00
ATOM	3936	C	ILE	A	728	49.711	-0.752	40.215	1.00	2.00
ATOM	3937	O	ILE	A	728	50.481	-1.291	41.009	1.00	2.00
ATOM	3938	N	THR	A	729	48.698	0.023	40.612	1.00	10.52
ATOM	3939	CA	THR	A	729	48.440	0.244	42.037	1.00	2.00
ATOM	3940	CB	THR	A	729	47.269	1.210	42.250	1.00	5.60
ATOM	3941	OG1	THR	A	729	47.745	2.534	41.931	1.00	2.22
ATOM	3942	CG2	THR	A	729	46.755	1.210	43.672	1.00	2.00
ATOM	3943	C	THR	A	729	48.261	-1.091	42.737	1.00	4.59
ATOM	3944	O	THR	A	729	49.067	-1.402	43.620	1.00	2.00
ATOM	3945	N	VAL	A	730	47.307	-1.913	42.307	1.00	2.00
ATOM	3946	CA	VAL	A	730	47.106	-3.229	42.915	1.00	2.00
ATOM	3947	CB	VAL	A	730	46.187	-4.138	42.085	1.00	2.00
ATOM	3948	CG1	VAL	A	730	45.976	-5.490	42.756	1.00	2.00
ATOM	3949	CG2	VAL	A	730	44.847	-3.455	41.844	1.00	9.14
ATOM	3950	C	VAL	A	730	48.437	-3.937	43.139	1.00	2.00
ATOM	3951	O	VAL	A	730	48.761	-4.250	44.285	1.00	10.66
ATOM	3952	N	ALA	A	731	49.209	-4.177	42.086	1.00	4.74
ATOM	3953	CA	ALA	A	731	50.524	-4.799	42.230	1.00	10.33
ATOM	3954	CB	ALA	A	731	51.350	-4.610	40.965	1.00	2.00
ATOM	3955	C	ALA	A	731	51.274	-4.200	43.416	1.00	14.45
ATOM	3956	O	ALA	A	731	51.463	-4.854	44.444	1.00	18.53
ATOM	3957	N	TRP	A	732	51.644	-2.927	43.302	1.00	12.20
ATOM	3958	CA	TRP	A	732	52.335	-2.204	44.364	1.00	10.53



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ATOM	3959	CB	TRP	A	732	52.185	-0.702	44.133	1.00	11.29
ATOM	3960	CG	TRP	A	732	52.967	0.179	45.053	1.00	11.60
ATOM	3961	CD2	TRP	A	732	52.507	0.793	46.263	1.00	2.00
ATOM	3962	CE2	TRP	A	732	53.586	1.539	46.784	1.00	2.00
ATOM	3963	CE3	TRP	A	732	51.300	0.799	46.956	1.00	3.57
ATOM	3964	CD1	TRP	A	732	54.268	0.568	44.895	1.00	15.73
ATOM	3965	NE1	TRP	A	732	54.649	1.385	45.934	1.00	12.42
ATOM	3966	CZ2	TRP	A	732	53.494	2.271	47.968	1.00	2.00
ATOM	3967	CZ3	TRP	A	732	51.208	1.526	48.128	1.00	2.00
ATOM	3968	CH2	TRP	A	732	52.297	2.249	48.628	1.00	5.04
ATOM	3969	C	TRP	A	732	51.805	-2.596	45.737	1.00	11.18
ATOM	3970	O	TRP	A	732	52.531	-3.144	46.569	1.00	19.72
ATOM	3971	N	CYS	A	733	50.523	-2.371	45.983	1.00	11.97
ATOM	3972	CA	CYS	A	733	49.892	-2.723	47.248	1.00	20.71
ATOM	3973	CB	CYS	A	733	48.400	-2.386	47.156	1.00	19.35
ATOM	3974	SG	CYS	A	733	48.158	-0.706	46.501	1.00	26.46
ATOM	3975	C	CYS	A	733	50.137	-4.167	47.646	1.00	25.50
ATOM	3976	O	CYS	A	733	50.543	-4.390	48.798	1.00	36.42
ATOM	3977	N	LYS	A	734	49.949	-5.140	46.753	1.00	16.35
ATOM	3978	CA	LYS	A	734	50.217	-6.532	47.115	1.00	8.45
ATOM	3979	CB	LYS	A	734	49.958	-7.531	45.996	1.00	10.28
ATOM	3980	CG	LYS	A	734	48.677	-7.308	45.219	1.00	16.99
ATOM	3981	CD	LYS	A	734	47.964	-8.604	44.866	1.00	15.17
ATOM	3982	CE	LYS	A	734	46.501	-8.325	44.547	1.00	14.72
ATOM	3983	NZ	LYS	A	734	45.851	-7.531	45.634	1.00	11.46
ATOM	3984	C	LYS	A	734	51.686	-6.626	47.535	1.00	8.19
ATOM	3985	O	LYS	A	734	52.002	-6.997	48.661	1.00	13.07
ATOM	3986	N	LYS	A	735	52.552	-6.228	46.613	1.00	2.00
ATOM	3987	CA	LYS	A	735	53.990	-6.208	46.831	1.00	3.81
ATOM	3988	CB	LYS	A	735	54.634	-5.236	45.831	1.00	2.00
ATOM	3989	CG	LYS	A	735	56.147	-5.146	45.987	1.00	13.94
ATOM	3990	CD	LYS	A	735	56.761	-4.261	44.916	1.00	19.05
ATOM	3991	CE	LYS	A	735	58.276	-4.359	44.891	1.00	14.96
ATOM	3992	NZ	LYS	A	735	58.863	-3.220	44.122	1.00	20.91
ATOM	3993	C	LYS	A	735	54.357	-5.814	48.254	1.00	5.96
ATOM	3994	O	LYS	A	735	54.689	-6.654	49.092	1.00	2.00
ATOM	3995	N	TRP	A	736	54.232	-4.532	48.577	1.00	7.21
ATOM	3996	CA	TRP	A	736	54.566	-3.993	49.886	1.00	13.26
ATOM	3997	CB	TRP	A	736	54.734	-2.461	49.733	1.00	9.37
ATOM	3998	CG	TRP	A	736	55.768	-2.204	48.671	1.00	9.59
ATOM	3999	CD2	TRP	A	736	57.176	-2.428	48.815	1.00	12.31
ATOM	4000	CE2	TRP	A	736	57.779	-2.097	47.585	1.00	13.42
ATOM	4001	CE3	TRP	A	736	57.983	-2.873	49.865	1.00	14.51
ATOM	4002	CD1	TRP	A	736	55.573	-1.776	47.392	1.00	13.09
ATOM	4003	NE1	TRP	A	736	56.777	-1.697	46.732	1.00	15.63
ATOM	4004	CZ2	TRP	A	736	59.153	-2.190	47.382	1.00	9.16
ATOM	4005	CZ3	TRP	A	736	59.343	-2.972	49.657	1.00	13.66
ATOM	4006	CH2	TRP	A	736	59.914	-2.629	48.426	1.00	13.68
ATOM	4007	C	TRP	A	736	53.608	-4.319	51.014	1.00	18.56
ATOM	4008	O	TRP	A	736	53.895	-3.979	52.172	1.00	21.67
ATOM	4009	N	GLY	A	737	52.475	-4.957	50.742	1.00	17.26
ATOM	4010	CA	GLY	A	737	51.508	-5.330	51.756	1.00	15.18
ATOM	4011	C	GLY	A	737	50.680	-4.166	52.273	1.00	12.83
ATOM	4012	O	GLY	A	737	50.280	-4.157	53.438	1.00	18.17
ATOM	4013	N	VAL	A	738	50.429	-3.177	51.425	1.00	10.32
ATOM	4014	CA	VAL	A	738	49.638	-2.011	51.791	1.00	5.72
ATOM	4015	CB	VAL	A	738	50.024	-0.718	51.044	1.00	2.00
ATOM	4016	CG1	VAL	A	738	49.475	0.497	51.787	1.00	2.00
ATOM	4017	CG2	VAL	A	738	51.523	-0.587	50.844	1.00	2.00
ATOM	4018	C	VAL	A	738	48.173	-2.283	51.436	1.00	10.58
ATOM	4019	O	VAL	A	738	47.805	-2.298	50.255	1.00	8.94
ATOM	4020	N	PRO	A	739	47.362	-2.494	52.463	1.00	2.00
ATOM	4021	CD	PRO	A	739	47.704	-2.465	53.895	1.00	2.00

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ATOM	4022	CA	PRO	A	739	45.945	-2.740	52.244	1.00	7.12
ATOM	4023	CB	PRO	A	739	45.306	-2.465	53.593	1.00	8.62
ATOM	4024	CG	PRO	A	739	46.387	-2.207	54.572	1.00	2.00
ATOM	4025	C	PRO	A	739	45.434	-1.833	51.137	1.00	16.04
ATOM	4026	O	PRO	A	739	45.741	-0.636	51.102	1.00	22.44
ATOM	4027	N	ILE	A	740	44.628	-2.369	50.222	1.00	18.51
ATOM	4028	CA	ILE	A	740	44.086	-1.577	49.128	1.00	14.18
ATOM	4029	CB	ILE	A	740	43.451	-2.438	48.022	1.00	10.10
ATOM	4030	CG2	ILE	A	740	42.138	-3.047	48.498	1.00	7.23
ATOM	4031	CG1	ILE	A	740	43.207	-1.595	46.767	1.00	8.99
ATOM	4032	CD1	ILE	A	740	44.435	-0.898	46.223	1.00	2.00
ATOM	4033	C	ILE	A	740	43.069	-0.547	49.602	1.00	14.40
ATOM	4034	O	ILE	A	740	42.871	0.470	48.925	1.00	18.33
ATOM	4035	N	GLU	A	741	41.457	-0.747	50.768	1.00	8.85
ATOM	4036	CA	GLU	A	741	41.491	0.197	51.305	1.00	14.31
ATOM	4037	CB	GLU	A	741	40.716	-0.342	52.504	1.00	17.28
ATOM	4038	CG	GLU	A	741	41.561	-0.956	53.601	1.00	21.09
ATOM	4039	CD	GLU	A	741	41.649	-2.469	53.510	1.00	24.23
ATOM	4040	OE1	GLU	A	741	41.726	-3.020	52.389	1.00	18.01
ATOM	4041	OE2	GLU	A	741	41.638	-3.102	54.592	1.00	25.30
ATOM	4042	C	GLU	A	741	42.128	1.522	51.710	1.00	16.15
ATOM	4043	O	GLU	A	741	41.418	2.524	51.827	1.00	23.76
ATOM	4044	N	LYS	A	742	43.439	1.548	51.914	1.00	13.07
ATOM	4045	CA	LYS	A	742	44.137	2.782	52.237	1.00	11.67
ATOM	4046	CB	LYS	A	742	45.508	2.477	52.836	1.00	15.79
ATOM	4047	CG	LYS	A	742	45.441	1.884	54.236	1.00	12.94
ATOM	4048	CD	LYS	A	742	44.878	2.903	55.222	1.00	12.38
ATOM	4049	CE	LYS	A	742	44.488	2.224	56.526	1.00	13.21
ATOM	4050	NZ	LYS	A	742	43.560	3.059	57.338	1.00	21.86
ATOM	4051	C	LYS	A	742	44.275	3.635	50.979	1.00	15.43
ATOM	4052	O	LYS	A	742	44.251	4.864	51.046	1.00	21.86
ATOM	4053	N	ILE	A	743	44.395	2.963	49.836	1.00	11.23
ATOM	4054	CA	ILE	A	743	44.538	3.631	48.550	1.00	2.00
ATOM	4055	CB	ILE	A	743	45.423	2.769	47.628	1.00	2.00
ATOM	4056	CG2	ILE	A	743	45.468	3.330	46.213	1.00	2.00
ATOM	4057	CG1	ILE	A	743	46.843	2.668	48.195	1.00	5.51
ATOM	4058	CD1	ILE	A	743	47.565	3.977	48.419	1.00	6.73
ATOM	4059	C	ILE	A	743	43.207	3.938	47.879	1.00	6.71
ATOM	4060	O	ILE	A	743	42.981	5.083	47.478	1.00	2.00
ATOM	4061	N	TYR	A	744	42.364	2.920	47.734	1.00	6.42
ATOM	4062	CA	TYR	A	744	41.070	3.057	47.082	1.00	2.00
ATOM	4063	CB	TYR	A	744	40.909	1.969	46.020	1.00	3.15
ATOM	4064	CG	TYR	A	744	41.772	2.040	44.786	1.00	4.98
ATOM	4065	CD1	TYR	A	744	42.325	3.236	44.349	1.00	2.00
ATOM	4066	CE1	TYR	A	744	43.106	3.293	43.214	1.00	2.00
ATOM	4067	CD2	TYR	A	744	42.012	0.901	44.020	1.00	2.00
ATOM	4068	CE2	TYR	A	744	42.788	0.950	42.877	1.00	2.87
ATOM	4069	CZ	TYR	A	744	43.340	2.147	42.483	1.00	2.00
ATOM	4070	OH	TYR	A	744	44.123	2.235	41.350	1.00	12.67
ATOM	4071	C	TYR	A	744	39.907	2.944	48.065	1.00	2.00
ATOM	4072	O	TYR	A	744	39.894	2.026	48.891	1.00	2.00
ATOM	4073	N	ASN	A	745	38.925	3.842	47.975	1.00	2.00
ATOM	4074	CA	ASN	A	745	37.769	3.780	48.869	1.00	7.73
ATOM	4075	CB	ASN	A	745	37.039	5.116	48.994	1.00	2.00
ATOM	4076	CG	ASN	A	745	36.793	5.795	47.662	1.00	8.15
ATOM	4077	OD1	ASN	A	745	36.709	5.132	46.626	1.00	2.00
ATOM	4078	ND2	ASN	A	745	36.679	7.119	47.657	1.00	6.45
ATOM	4079	C	ASN	A	745	36.827	2.683	48.382	1.00	9.43
ATOM	4080	O	ASN	A	745	37.219	1.880	47.536	1.00	7.85
ATOM	4081	N	LYS	A	746	35.623	2.657	48.935	1.00	17.25
ATOM	4082	CA	LYS	A	746	34.628	1.652	48.544	1.00	14.75
ATOM	4083	CB	LYS	A	746	33.425	1.732	49.469	1.00	12.93
ATOM	4084	CG	LYS	A	746	32.060	1.301	48.994	1.00	16.27

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ATOM	4085	CD	LYS	A	746	31.259	2.452	48.400	1.00	22.20
ATOM	4086	CE	LYS	A	746	30.993	3.548	49.420	1.00	26.38
ATOM	4087	NZ	LYS	A	746	30.999	4.916	48.825	1.00	25.50
ATOM	4088	C	LYS	A	746	34.272	1.817	47.075	1.00	6.93
ATOM	4089	O	LYS	A	746	34.532	0.933	46.256	1.00	2.00
ATOM	4090	N	THR	A	747	33.751	2.980	46.702	1.00	5.56
ATOM	4091	CA	THR	A	747	33.355	3.233	45.326	1.00	2.00
ATOM	4092	CB	THR	A	747	32.903	4.687	45.094	1.00	3.17
ATOM	4093	OG1	THR	A	747	33.302	5.083	43.774	1.00	2.00
ATOM	4094	CG2	THR	A	747	33.480	5.656	46.106	1.00	2.00
ATOM	4095	C	THR	A	747	34.402	2.853	44.291	1.00	2.00
ATOM	4096	C	THR	A	747	34.047	2.226	43.288	1.00	9.35
ATOM	4097	N	GLN	A	748	35.658	3.225	44.494	1.00	11.37
ATOM	4098	CA	GLN	A	748	36.758	2.916	43.591	1.00	3.34
ATOM	4099	CB	GLN	A	748	37.976	3.777	43.938	1.00	9.38
ATOM	4100	CG	GLN	A	748	37.717	5.256	43.699	1.00	21.67
ATOM	4101	CD	GLN	A	748	38.550	6.195	44.540	1.00	26.32
ATOM	4102	OE1	GLN	A	748	38.352	7.412	44.474	1.00	31.67
ATOM	4103	NE2	GLN	A	748	39.467	5.666	45.342	1.00	29.06
ATOM	4104	C	GLN	A	748	37.137	1.444	43.639	1.00	4.45
ATOM	4105	O	GLN	A	748	37.495	0.842	42.627	1.00	7.12
ATOM	4106	N	ARG	A	749	37.010	0.848	44.818	1.00	7.18
ATOM	4107	CA	ARG	A	749	37.306	-0.575	44.996	1.00	10.95
ATOM	4108	CB	ARG	A	749	37.201	-0.946	46.471	1.00	18.14
ATOM	4109	CG	ARG	A	749	38.313	-1.832	47.007	1.00	21.14
ATOM	4110	CD	ARG	A	749	38.627	-1.498	48.455	1.00	22.64
ATOM	4111	NE	ARG	A	749	37.478	-1.617	49.342	1.00	28.27
ATOM	4112	CZ	ARG	A	749	37.219	-0.761	50.328	1.00	37.04
ATOM	4113	NH1	ARG	A	749	38.012	0.282	50.548	1.00	39.75
ATOM	4114	NH2	ARG	A	749	36.148	-0.945	51.091	1.00	38.04
ATOM	4115	C	ARG	A	749	36.363	-1.386	44.116	1.00	8.62
ATOM	4116	O	ARG	A	749	36.819	-2.315	43.452	1.00	14.49
ATOM	4117	N	GLU	A	750	35.084	-1.026	44.075	1.00	9.16
ATOM	4118	CA	GLU	A	750	34.099	-1.692	43.231	1.00	5.55
ATOM	4119	CB	GLU	A	750	32.679	-1.240	43.560	1.00	6.69
ATOM	4120	CG	GLU	A	750	32.205	-1.598	44.959	1.00	17.26
ATOM	4121	CD	GLU	A	750	30.992	-0.812	45.414	1.00	19.48
ATOM	4122	OE1	GLU	A	750	30.452	-0.018	44.610	1.00	28.75
ATOM	4123	OE2	GLU	A	750	30.573	-0.984	46.578	1.00	14.07
ATOM	4124	C	GLU	A	750	34.405	-1.392	41.769	1.00	2.00
ATOM	4125	O	GLU	A	750	34.579	-2.308	40.962	1.00	2.59
ATOM	4126	N	LYS	A	751	34.603	-0.108	41.449	1.00	2.00
ATOM	4127	CA	LYS	A	751	34.957	0.305	40.102	1.00	4.07
ATOM	4128	CB	LYS	A	751	35.305	1.800	39.997	1.00	2.00
ATOM	4129	CG	LYS	A	751	35.952	2.176	38.678	1.00	2.00
ATOM	4130	CD	LYS	A	751	36.064	3.647	38.353	1.00	2.00
ATOM	4131	CE	LYS	A	751	36.628	3.860	36.951	1.00	3.44
ATOM	4132	NZ	LYS	A	751	37.230	5.212	36.778	1.00	2.00
ATOM	4133	C	LYS	A	751	36.147	-0.508	39.587	1.00	5.05
ATOM	4134	O	LYS	A	751	36.135	-0.916	38.421	1.00	7.64
ATOM	4135	N	PHE	A	752	37.151	-0.686	40.455	1.00	2.00
ATOM	4136	CA	PHE	A	752	38.332	-1.426	40.013	1.00	10.41
ATOM	4137	CB	PHE	A	752	39.610	-0.721	40.471	1.00	2.00
ATOM	4138	CG	PHE	A	752	39.919	0.576	39.786	1.00	3.35
ATOM	4139	CD1	PHE	A	752	40.084	0.639	38.414	1.00	5.15
ATOM	4140	CD2	PHE	A	752	40.057	1.742	40.523	1.00	2.00
ATOM	4141	CE1	PHE	A	752	40.375	1.830	37.782	1.00	2.27
ATOM	4142	CE2	PHE	A	752	40.345	2.938	39.900	1.00	2.00
ATOM	4143	CZ	PHE	A	752	40.506	2.983	38.529	1.00	2.00
ATOM	4144	C	PHE	A	752	38.373	-2.885	40.434	1.00	12.44
ATOM	4145	O	PHE	A	752	39.475	-3.458	40.462	1.00	16.82
ATOM	4146	N	ALA	A	753	37.227	-3.517	40.684	1.00	2.00
ATOM	4147	CA	ALA	A	753	37.228	-4.929	41.070	1.00	4.29

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ATOM	4148	CB	ALA	A	753	35.801	-5.442	41.169	1.00	4.39
ATOM	4149	C	ALA	A	753	38.058	-5.783	40.120	1.00	2.00
ATOM	4150	O	ALA	A	753	38.927	-6.539	40.566	1.00	9.50
ATOM	4151	N	TRP	A	754	37.881	-5.662	38.806	1.00	8.16
ATOM	4152	CA	TRP	A	754	38.636	-6.447	37.839	1.00	14.00
ATOM	4153	CB	TRP	A	754	38.293	-6.074	36.412	1.00	12.57
ATOM	4154	CG	TRP	A	754	38.607	-4.722	35.878	1.00	17.17
ATOM	4155	CD2	TRP	A	754	39.829	-4.313	35.245	1.00	17.04
ATOM	4156	CE2	TRP	A	754	39.685	-2.962	34.875	1.00	15.34
ATOM	4157	CE3	TRP	A	754	41.035	-4.965	34.968	1.00	17.44
ATOM	4158	CD1	TRP	A	754	37.795	-3.623	35.856	1.00	19.15
ATOM	4159	NE1	TRP	A	754	38.431	-2.562	35.256	1.00	16.80
ATOM	4160	CZ2	TRP	A	754	40.701	-2.247	34.246	1.00	20.66
ATOM	4161	CZ3	TRP	A	754	42.038	-4.254	34.340	1.00	24.26
ATOM	4162	CH2	TRP	A	754	41.866	-2.908	33.980	1.00	25.25
ATOM	4163	C	TRP	A	754	40.136	-6.407	38.106	1.00	21.27
ATOM	4164	O	TRP	A	754	40.786	-7.459	38.117	1.00	26.15
ATOM	4165	N	ALA	A	755	40.692	-5.222	38.337	1.00	23.13
ATOM	4166	CA	ALA	A	755	42.112	-5.098	38.640	1.00	21.03
ATOM	4167	CB	ALA	A	755	42.501	-3.634	38.750	1.00	20.09
ATOM	4168	C	ALA	A	755	42.463	-5.823	39.932	1.00	18.87
ATOM	4169	O	ALA	A	755	43.312	-6.714	39.950	1.00	22.11
ATOM	4170	N	ILE	A	756	41.780	-5.503	41.027	1.00	14.67
ATOM	4171	CA	ILE	A	756	42.034	-6.103	42.330	1.00	11.70
ATOM	4172	CB	ILE	A	756	41.059	-5.577	43.406	1.00	7.12
ATOM	4173	CG2	ILE	A	756	41.287	-6.270	44.743	1.00	2.00
ATOM	4174	CG1	ILE	A	756	41.212	-4.061	43.581	1.00	2.00
ATOM	4175	CD1	ILE	A	756	40.369	-3.474	44.694	1.00	3.23
ATOM	4176	C	ILE	A	756	42.044	-7.625	42.327	1.00	17.67
ATOM	4177	O	ILE	A	756	42.804	-8.231	43.099	1.00	23.41
ATOM	4178	N	ASP	A	757	41.226	-8.277	41.511	1.00	19.88
ATOM	4179	CA	ASP	A	757	41.207	-9.730	41.454	1.00	25.05
ATOM	4180	CB	ASP	A	757	39.810	-10.237	41.080	1.00	27.31
ATOM	4181	CG	ASP	A	757	39.803	-11.733	40.810	1.00	29.90
ATOM	4182	OD1	ASP	A	757	39.677	-12.110	39.626	1.00	32.01
ATOM	4183	OD2	ASP	A	757	39.945	-12.511	41.776	1.00	30.80
ATOM	4184	C	ASP	A	757	42.224	-10.271	40.451	1.00	27.29
ATOM	4185	O	ASP	A	757	42.919	-11.250	40.724	1.00	34.23
ATOM	4186	N	MET	A	758	42.262	-9.657	39.276	1.00	22.92
ATOM	4187	CA	MET	A	758	43.161	-10.111	38.212	1.00	17.99
ATOM	4188	CB	MET	A	758	42.350	-10.231	36.931	1.00	19.87
ATOM	4189	CG	MET	A	758	43.066	-10.296	35.604	1.00	22.95
ATOM	4190	SD	MET	A	758	43.149	-8.709	34.752	1.00	29.33
ATOM	4191	CE	MET	A	758	41.414	-8.366	34.488	1.00	25.09
ATOM	4192	C	MET	A	758	44.345	-9.170	38.097	1.00	24.87
ATOM	4193	O	MET	A	758	44.268	-8.138	37.426	1.00	35.43
ATOM	4194	N	ALA	A	759	45.418	-9.465	38.822	1.00	17.94
ATOM	4195	CA	ALA	A	759	46.630	-8.561	38.830	1.00	15.34
ATOM	4196	CB	ALA	A	759	46.368	-7.166	38.759	1.00	7.90
ATOM	4197	C	ALA	A	759	47.447	-8.982	40.087	1.00	23.10
ATOM	4198	O	ALA	A	759	47.114	-8.579	41.205	1.00	26.80
ATOM	4199	N	ASP	A	760	48.520	-9.740	39.872	1.00	16.42
ATOM	4200	CA	ASP	A	760	49.395	-10.145	40.964	1.00	11.53
ATOM	4201	CB	ASP	A	760	50.090	-11.465	40.625	1.00	16.62
ATOM	4202	CG	ASP	A	760	50.546	-11.568	39.183	1.00	23.44
ATOM	4203	OD1	ASP	A	760	50.423	-12.664	38.589	1.00	23.59
ATOM	4204	OD2	ASP	A	760	51.027	-10.569	38.606	1.00	28.03
ATOM	4205	C	ASP	A	760	50.414	-9.052	41.236	1.00	14.35
ATOM	4206	O	ASP	A	760	50.452	-8.038	40.543	1.00	18.04
ATOM	4207	N	GLU	A	761	51.300	-9.309	42.187	1.00	18.66
ATOM	4208	CA	GLU	A	761	52.365	-8.389	42.559	1.00	18.56
ATOM	4209	CB	GLU	A	761	53.104	-8.935	43.782	1.00	23.45
ATOM	4210	CG	GLU	A	761	53.796	-10.268	43.597	1.00	31.45

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ATOM	4211	CD	GLU	A	761	52.891	-11.481	43.618	1.00	36.11
ATOM	4212	OE1	GLU	A	761	51.727	-11.364	44.061	1.00	37.94
ATOM	4213	OE2	GLU	A	761	53.340	-12.569	43.189	1.00	40.58
ATOM	4214	C	GLU	A	761	53.330	-8.151	41.407	1.00	19.08
ATOM	4215	O	GLU	A	761	53.859	-7.051	41.237	1.00	25.70
ATOM	4216	N	ASP	A	762	53.535	-9.154	40.559	1.00	17.19
ATOM	4217	CA	ASP	A	762	54.419	-9.076	39.411	1.00	17.85
ATOM	4218	CB	ASP	A	762	54.944	-10.484	39.083	1.00	18.51
ATOM	4219	CG	ASP	A	762	55.514	-11.230	40.273	1.00	21.27
ATOM	4220	OD1	ASP	A	762	56.457	-10.709	40.911	1.00	24.09
ATOM	4221	OD2	ASP	A	762	55.037	-12.343	40.593	1.00	14.28
ATOM	4222	C	ASP	A	762	53.785	-8.459	38.168	1.00	17.59
ATOM	4223	O	ASP	A	762	54.233	-8.766	37.052	1.00	14.05
ATOM	4224	N	TYR	A	763	52.779	-7.592	38.298	1.00	11.16
ATOM	4225	CA	TYR	A	763	52.186	-6.958	37.130	1.00	12.26
ATOM	4226	CB	TYR	A	763	50.756	-6.472	37.367	1.00	11.12
ATOM	4227	CG	TYR	A	763	50.198	-5.681	36.198	1.00	15.77
ATOM	4228	CD1	TYR	A	763	49.741	-6.322	35.054	1.00	19.53
ATOM	4229	CE1	TYR	A	763	49.240	-5.603	33.981	1.00	20.37
ATOM	4230	CD2	TYR	A	763	50.141	-4.294	36.233	1.00	15.73
ATOM	4231	CE2	TYR	A	763	49.642	-3.564	35.170	1.00	16.83
ATOM	4232	CZ	TYR	A	763	49.191	-4.226	34.046	1.00	21.57
ATOM	4233	OH	TYR	A	763	48.692	-3.504	32.986	1.00	16.91
ATOM	4234	C	TYR	A	763	53.060	-5.791	36.669	1.00	13.21
ATOM	4235	O	TYR	A	763	53.411	-4.914	37.455	1.00	15.66
ATOM	4236	N	GLU	A	764	53.391	-5.769	35.384	1.00	15.31
ATOM	4237	CA	GLU	A	764	54.196	-4.700	34.818	1.00	16.80
ATOM	4238	CB	GLU	A	764	55.553	-5.226	34.350	1.00	19.24
ATOM	4239	CG	GLU	A	764	56.588	-5.338	35.459	1.00	23.91
ATOM	4240	CD	GLU	A	764	57.980	-5.541	34.879	1.00	24.60
ATOM	4241	OE1	GLU	A	764	58.409	-4.664	34.099	1.00	31.34
ATOM	4242	OE2	GLU	A	764	58.603	-6.572	35.204	1.00	15.52
ATOM	4243	C	GLU	A	764	53.528	-4.019	33.622	1.00	17.23
ATOM	4244	O	GLU	A	764	53.302	-4.654	32.592	1.00	13.87
ATOM	4245	N	PHE	A	765	53.257	-2.725	33.781	1.00	10.11
ATOM	4246	CA	PHE	A	765	52.644	-1.970	32.693	1.00	5.03
ATOM	4247	CB	PHE	A	765	52.142	-0.601	33.134	1.00	2.00
ATOM	4248	CG	PHE	A	765	51.525	0.212	32.029	1.00	2.00
ATOM	4249	CD1	PHE	A	765	50.167	0.155	31.774	1.00	2.00
ATOM	4250	CD2	PHE	A	765	52.313	1.032	31.240	1.00	2.76
ATOM	4251	CE1	PHE	A	765	49.609	0.903	30.756	1.00	5.09
ATOM	4252	CE2	PHE	A	765	51.763	1.782	30.223	1.00	7.12
ATOM	4253	CZ	PHE	A	765	50.405	1.718	29.978	1.00	6.55
ATOM	4254	C	PHE	A	765	53.682	-1.848	31.581	1.00	7.74
ATOM	4255	O	PHE	A	765	53.742	-2.797	30.771	1.00	10.46
ATOM	3892	S	SUL	Z	1	41.430	14.292	30.827	1.00	12.54
ATOM	3893	O1	SUL	Z	1	42.258	15.281	31.592	1.00	11.97
ATOM	3894	O2	SUL	Z	1	41.282	14.768	29.402	1.00	2.00
ATOM	3895	O3	SUL	Z	1	40.057	14.241	31.440	1.00	9.35
ATOM	3692	O5*	A	U	1	38.100	15.286	3.960	1.00	67.75
ATOM	3693	C5*	A	U	1	38.592	15.997	2.813	1.00	66.79
ATOM	3694	C4*	A	U	1	37.868	17.318	2.677	1.00	65.85
ATOM	3695	O4*	A	U	1	36.495	17.125	2.240	1.00	64.91
ATOM	3696	C3*	A	U	1	37.779	18.041	4.013	1.00	65.45
ATOM	3697	O3*	A	U	1	37.763	19.429	3.776	1.00	65.31
ATOM	3698	C2*	A	U	1	36.430	17.613	4.556	1.00	65.63
ATOM	3699	C1*	A	U	1	35.591	17.447	3.300	1.00	62.99
ATOM	3700	N9	A	U	1	34.665	16.332	3.438	1.00	59.58
ATOM	3701	C8	A	U	1	34.988	15.050	3.808	1.00	55.90
ATOM	3702	N7	A	U	1	33.964	14.240	3.838	1.00	56.22
ATOM	3703	C5	A	U	1	32.892	15.035	3.472	1.00	57.92
ATOM	3704	C6	A	U	1	31.524	14.758	3.304	1.00	59.41
ATOM	3705	N6	A	U	1	30.992	13.549	3.476	1.00	59.84

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ATOM	3706	N1	A U	1	30.713	15.784	2.935	1.00	57.87
ATOM	3707	C2	A U	1	31.261	16.984	2.736	1.00	58.70
ATOM	3708	N3	A U	1	32.535	17.362	2.850	1.00	59.28
ATOM	3709	C4	A U	1	33.308	16.329	3.228	1.00	59.41
ATOM	3710	P	A U	2	38.081	20.424	4.977	1.00	63.51
ATOM	3711	O1P	A U	2	38.809	21.557	4.324	1.00	68.17
ATOM	3712	O2P	A U	2	38.702	19.690	6.094	1.00	62.57
ATOM	3713	O5*	A U	2	36.646	20.933	5.432	1.00	60.64
ATOM	3714	C5*	A U	2	35.535	20.056	5.385	1.00	54.13
ATOM	3715	C4*	A U	2	34.367	20.629	6.148	1.00	50.96
ATOM	3716	O4*	A U	2	33.362	19.601	6.107	1.00	48.82
ATOM	3717	C3*	A U	2	34.580	20.911	7.634	1.00	48.73
ATOM	3718	O3*	A U	2	33.616	21.900	8.035	1.00	49.41
ATOM	3719	C2*	A U	2	34.290	19.567	8.272	1.00	45.45
ATOM	3720	C1*	A U	2	33.176	19.036	7.389	1.00	46.80
ATOM	3721	N9	A U	2	33.151	17.588	7.211	1.00	47.47
ATOM	3722	C8	A U	2	34.169	16.668	7.299	1.00	40.37
ATOM	3723	N7	A U	2	33.785	15.438	7.071	1.00	39.85
ATOM	3724	C5	A U	2	32.425	15.555	6.819	1.00	40.57
ATOM	3725	C6	A U	2	31.439	14.618	6.520	1.00	40.74
ATOM	3726	N6	A U	2	31.676	13.324	6.406	1.00	40.34
ATOM	3727	N1	A U	2	30.178	15.064	6.334	1.00	40.85
ATOM	3728	C2	A U	2	29.940	16.373	6.433	1.00	41.00
ATOM	3729	N3	A U	2	30.786	17.357	6.702	1.00	43.48
ATOM	3730	C4	A U	2	32.026	16.874	6.894	1.00	44.16
ATOM	3731	P	A U	3	33.447	22.305	9.590	1.00	53.46
ATOM	3732	O1P	A U	3	33.822	23.716	9.760	1.00	52.27
ATOM	3733	O2P	A U	3	34.049	21.296	10.479	1.00	55.55
ATOM	3734	O5*	A U	3	31.874	22.163	9.810	1.00	52.35
ATOM	3735	C5*	A U	3	30.950	22.577	8.785	1.00	51.41
ATOM	3736	C4*	A U	3	29.562	22.042	9.060	1.00	48.37
ATOM	3737	O4*	A U	3	29.511	20.632	8.779	1.00	49.62
ATOM	3738	C3*	A U	3	29.008	22.212	10.473	1.00	46.19
ATOM	3739	O3*	A U	3	27.627	22.523	10.336	1.00	45.61
ATOM	3740	C2*	A U	3	29.211	20.852	11.113	1.00	44.35
ATOM	3741	C1*	A U	3	29.125	19.889	9.935	1.00	47.59
ATOM	3742	N9	A U	3	30.002	18.715	10.002	1.00	44.63
ATOM	3743	C8	A U	3	31.353	18.683	10.251	1.00	41.87
ATOM	3744	N7	A U	3	31.872	17.478	10.196	1.00	40.47
ATOM	3745	C5	A U	3	30.787	16.662	9.921	1.00	36.89
ATOM	3746	C6	A U	3	30.668	15.278	9.754	1.00	32.55
ATOM	3747	N6	A U	3	31.662	14.430	9.882	1.00	26.18
ATOM	3748	N1	A U	3	29.460	14.784	9.451	1.00	35.71
ATOM	3749	C2	A U	3	28.436	15.632	9.343	1.00	36.38
ATOM	3750	N3	A U	3	28.417	16.954	9.501	1.00	32.83
ATOM	3751	C4	A U	3	29.635	17.413	9.791	1.00	40.14
ATOM	3752	P	A U	4	26.729	22.849	11.629	1.00	52.51
ATOM	3753	O1P	A U	4	25.614	23.587	11.034	1.00	46.39
ATOM	3754	O2P	A U	4	27.538	23.458	12.730	1.00	47.52
ATOM	3755	O5*	A U	4	26.128	21.426	11.982	1.00	45.29
ATOM	3756	C5*	A U	4	25.458	20.742	10.947	1.00	42.18
ATOM	3757	C4*	A U	4	24.925	19.439	11.448	1.00	40.80
ATOM	3758	O4*	A U	4	25.985	18.471	11.479	1.00	41.26
ATOM	3759	C3*	A U	4	24.349	19.522	12.850	1.00	43.11
ATOM	3760	O3*	A U	4	23.108	18.808	12.820	1.00	49.56
ATOM	3761	C2*	A U	4	25.410	18.860	13.709	1.00	40.17
ATOM	3762	C1*	A U	4	26.010	17.850	12.741	1.00	41.14
ATOM	3763	N9	A U	4	27.391	17.407	12.974	1.00	41.65
ATOM	3764	C8	A U	4	28.488	18.145	13.336	1.00	38.36
ATOM	3765	N7	A U	4	29.579	17.439	13.410	1.00	41.74
ATOM	3766	C5	A U	4	29.193	16.163	13.093	1.00	41.24
ATOM	3767	C6	A U	4	29.900	14.957	12.996	1.00	43.57
ATOM	3768	N6	A U	4	31.205	14.841	13.209	1.00	45.22

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ATOM	3769	N1	A U	4	29.197	13.846	12.658	1.00	43.03
ATOM	3770	C2	A U	4	27.894	13.957	12.442	1.00	44.59
ATOM	3771	N3	A U	4	27.125	15.035	12.500	1.00	42.38
ATOM	3772	C4	A U	4	27.842	16.112	12.829	1.00	42.68
ATOM	3773	P	A U	5	22.188	18.720	14.137	1.00	52.16
ATOM	3774	O1P	A U	5	20.784	18.971	13.716	1.00	49.85
ATOM	3775	O2P	A U	5	22.818	19.562	15.160	1.00	51.60
ATOM	3776	O5*	A U	5	22.324	17.185	14.522	1.00	49.25
ATOM	3777	C5*	A U	5	22.373	16.197	13.483	1.00	44.93
ATOM	3778	C4*	A U	5	22.718	14.855	14.068	1.00	44.23
ATOM	3779	O4*	A U	5	24.143	14.732	14.216	1.00	42.51
ATOM	3780	C3*	A U	5	22.123	14.639	15.453	1.00	44.98
ATOM	3781	O3*	A U	5	21.563	13.329	15.493	1.00	47.90
ATOM	3782	C2*	A U	5	23.316	14.796	16.382	1.00	43.27
ATOM	3783	C1*	A U	5	24.458	14.288	15.516	1.00	40.18
ATOM	3784	N9	A U	5	25.796	14.788	15.839	1.00	33.19
ATOM	3785	C8	A U	5	26.171	16.045	16.236	1.00	33.29
ATOM	3786	N7	A U	5	27.453	16.170	16.453	1.00	31.10
ATOM	3787	C5	A U	5	27.961	14.913	16.184	1.00	27.03
ATOM	3788	C6	A U	5	29.266	14.381	16.241	1.00	28.38
ATOM	3789	N6	A U	5	30.343	15.075	16.569	1.00	28.75
ATOM	3790	N1	A U	5	29.423	13.089	15.933	1.00	28.15
ATOM	3791	C2	A U	5	28.347	12.385	15.567	1.00	31.92
ATOM	3792	N3	A U	5	27.077	12.769	15.465	1.00	31.52
ATOM	3793	C4	A U	5	26.951	14.057	15.798	1.00	29.54
ATOM	3794	P	G U	6	20.814	12.814	16.818	1.00	51.52
ATOM	3795	O1P	G U	6	20.562	14.017	17.678	1.00	52.34
ATOM	3796	O2P	G U	6	19.700	11.999	16.315	1.00	50.65
ATOM	3797	O5*	G U	6	21.904	11.875	17.501	1.00	45.86
ATOM	3798	C5*	G U	6	22.557	10.897	16.703	1.00	39.37
ATOM	3799	C4*	G U	6	23.641	10.198	17.480	1.00	35.25
ATOM	3800	O4*	G U	6	24.845	10.997	17.490	1.00	34.04
ATOM	3801	C3*	G U	6	23.322	9.858	18.936	1.00	34.67
ATOM	3802	O3*	G U	6	23.447	8.453	19.097	1.00	30.56
ATOM	3803	C2*	G U	6	24.420	10.576	19.715	1.00	34.25
ATOM	3804	C1*	G U	6	25.526	10.754	18.685	1.00	29.27
ATOM	3805	N9	G U	6	26.421	11.880	18.911	1.00	24.74
ATOM	3806	C8	G U	6	26.077	13.189	19.065	1.00	26.52
ATOM	3807	N7	G U	6	27.105	13.962	19.276	1.00	29.99
ATOM	3808	C5	G U	6	28.180	13.106	19.258	1.00	27.43
ATOM	3809	C6	G U	6	29.548	13.364	19.424	1.00	30.60
ATOM	3810	O6	G U	6	30.101	14.419	19.654	1.00	34.78
ATOM	3811	N1	G U	6	30.298	12.220	19.296	1.00	29.83
ATOM	3812	C2	G U	6	29.791	10.984	19.040	1.00	29.96
ATOM	3813	N2	G U	6	30.666	10.009	18.932	1.00	23.47
ATOM	3814	N3	G U	6	28.518	10.728	18.897	1.00	26.30
ATOM	3815	C4	G U	6	27.775	11.824	19.015	1.00	23.14
ATOM	3816	P	A U	7	23.073	7.771	20.488	1.00	31.21
ATOM	3817	O1P	A U	7	22.488	6.455	20.195	1.00	34.01
ATOM	3818	O2P	A U	7	22.372	8.685	21.429	1.00	28.55
ATOM	3819	O5*	A U	7	24.511	7.512	21.100	1.00	27.01
ATOM	3820	C5*	A U	7	25.450	6.786	20.361	1.00	26.75
ATOM	3821	C4*	A U	7	26.731	6.675	21.142	1.00	31.61
ATOM	3822	O4*	A U	7	27.401	7.943	21.182	1.00	31.95
ATOM	3823	C3*	A U	7	26.549	6.256	22.593	1.00	35.25
ATOM	3824	O3*	A U	7	27.518	5.252	22.868	1.00	41.28
ATOM	3825	C2*	A U	7	26.812	7.538	23.373	1.00	34.95
ATOM	3826	C1*	A U	7	27.828	8.220	22.493	1.00	33.52
ATOM	3827	N9	A U	7	27.995	9.677	22.612	1.00	34.92
ATOM	3828	C8	A U	7	27.050	10.667	22.707	1.00	33.12
ATOM	3829	N7	A U	7	27.562	11.876	22.751	1.00	34.08
ATOM	3830	C5	A U	7	28.928	11.668	22.695	1.00	27.54
ATOM	3831	C6	A U	7	30.025	12.546	22.703	1.00	30.72

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ATOM	3832	N6	A U	7	29.930	13.858	22.790	1.00	23.93
ATOM	3833	N1	A U	7	31.243	12.010	22.619	1.00	25.66
ATOM	3834	C2	A U	7	31.353	10.686	22.537	1.00	25.10
ATOM	3835	N3	A U	7	30.411	9.760	22.527	1.00	28.15
ATOM	3836	C4	A U	7	29.208	10.321	22.610	1.00	27.69
ATOM	3837	P	C U	8	27.436	4.439	24.235	1.00	31.07
ATOM	3838	O1P	C U	8	28.413	3.349	24.147	1.00	44.05
ATOM	3839	O2P	C U	8	26.002	4.125	24.501	1.00	42.86
ATOM	3840	O5*	C U	8	27.919	5.535	25.276	1.00	45.30
ATOM	3841	C5*	C U	8	28.843	5.222	26.305	1.00	41.57
ATOM	3842	C4*	C U	8	30.177	5.857	26.013	1.00	42.45
ATOM	3843	O4*	C U	8	29.988	7.124	25.324	1.00	42.98
ATOM	3844	C3*	C U	8	30.876	6.188	27.323	1.00	42.93
ATOM	3845	O3*	C U	8	32.091	5.500	27.552	1.00	44.98
ATOM	3846	C2*	C U	8	31.130	7.678	27.278	1.00	42.65
ATOM	3847	C1*	C U	8	30.908	8.075	25.843	1.00	41.29
ATOM	3848	N1	C U	8	30.269	9.402	25.875	1.00	38.92
ATOM	3849	C2	C U	8	31.098	10.541	25.847	1.00	38.85
ATOM	3850	O2	C U	8	32.298	10.400	25.627	1.00	36.29
ATOM	3851	N3	C U	8	30.563	11.752	26.049	1.00	34.52
ATOM	3852	C4	C U	8	29.258	11.871	26.245	1.00	35.06
ATOM	3853	N4	C U	8	28.801	13.072	26.517	1.00	27.45
ATOM	3854	C5	C U	8	28.378	10.753	26.187	1.00	31.33
ATOM	3855	C6	C U	8	28.921	9.545	25.999	1.00	33.04
ATOM	3856	N1	SIU U	9	33.935	10.308	29.313	1.00	38.02
ATOM	3857	C2	SIU U	9	33.900	11.682	29.353	1.00	38.23
ATOM	3858	N3	SIU U	9	32.658	12.210	29.528	1.00	35.58
ATOM	3859	C4	SIU U	9	31.486	11.515	29.677	1.00	40.14
ATOM	3860	C5	SIU U	9	31.612	10.098	29.668	1.00	36.98
ATOM	3861	C6	SIU U	9	32.806	9.566	29.483	1.00	40.91
ATOM	3862	O2	SIU U	9	34.880	12.375	29.264	1.00	42.82
ATOM	3863	O4	SIU U	9	30.435	12.108	29.798	1.00	38.14
ATOM	3864	I5	SIU U	9	30.033	9.027	29.942	0.29	61.22
ATOM	3865	C1*	SIU U	9	35.191	9.621	29.069	1.00	33.19
ATOM	3866	C2*	SIU U	9	35.599	8.674	30.174	1.00	34.07
ATOM	3867	C3*	SIU U	9	36.488	7.716	29.408	1.00	35.10
ATOM	3868	C4*	SIU U	9	35.781	7.597	28.058	1.00	35.39
ATOM	3869	O3*	SIU U	9	37.761	8.311	29.160	1.00	37.76
ATOM	3870	O4*	SIU U	9	35.007	8.808	27.930	1.00	33.09
ATOM	3871	C5*	SIU U	9	34.853	6.418	27.953	1.00	37.53
ATOM	3872	O5*	SIU U	9	33.886	6.474	29.011	1.00	40.53
ATOM	3873	P	SIU U	9	32.673	5.450	29.052	1.00	46.93
ATOM	3874	O1P	SIU U	9	33.167	4.065	29.298	1.00	45.47
ATOM	3875	O2P	SIU U	9	31.645	6.030	29.950	1.00	35.21
ATOM	3876	N1	SIU U	10	35.714	13.098	32.343	1.00	37.17
ATOM	3877	C2	SIU U	10	34.889	14.179	32.478	1.00	35.64
ATOM	3878	N3	SIU U	10	33.622	13.883	32.855	1.00	34.99
ATOM	3879	C4	SIU U	10	33.105	12.647	33.112	1.00	37.18
ATOM	3880	C5	SIU U	10	34.026	11.556	32.998	1.00	37.54
ATOM	3881	C6	SIU U	10	35.275	11.823	32.609	1.00	37.40
ATOM	3882	O2	SIU U	10	35.256	15.316	32.276	1.00	35.36
ATOM	3883	O4	SIU U	10	31.932	12.536	33.398	1.00	44.00
ATOM	3884	I5	SIU U	10	33.405	9.760	33.421	0.18	49.69
ATOM	3885	C1*	SIU U	10	37.064	13.406	31.903	1.00	34.83
ATOM	3886	C2*	SIU U	10	38.114	13.119	32.932	1.00	38.87
ATOM	3887	C3*	SIU U	10	39.323	12.638	32.137	1.00	38.90
ATOM	3888	C4*	SIU U	10	38.819	12.530	30.698	1.00	35.20
ATOM	3889	O4*	SIU U	10	37.385	12.656	30.766	1.00	32.85
ATOM	3890	C5*	SIU U	10	39.088	11.218	29.989	1.00	34.10
ATOM	3891	O5*	SIU U	10	38.527	10.084	30.753	1.00	38.04
ATOM	3892	P	SIU U	10	38.797	8.551	30.356	1.00	37.59
ATOM	3893	O1P	SIU U	10	40.145	8.356	29.771	1.00	32.35
ATOM	3894	O2P	SIU U	10	38.370	7.704	31.491	1.00	37.44



ATOM	3895	O5*	T U	11	40.508	14.694	35.334	1.00	62.30
ATOM	3896	C5*	T U	11	40.318	15.898	34.563	1.00	59.59
ATOM	3897	C4*	T U	11	39.046	16.637	34.971	1.00	62.19
ATOM	3898	O4*	T U	11	37.831	15.925	34.574	1.00	61.05
ATOM	3899	C3*	T U	11	38.816	17.090	36.401	1.00	59.80
ATOM	3900	O3*	T U	11	39.425	18.380	36.607	1.00	59.29
ATOM	3901	C2*	T U	11	37.273	17.323	36.426	1.00	57.23
ATOM	3902	C1*	T U	11	36.737	16.481	35.283	1.00	55.37
ATOM	3903	N1	T U	11	35.839	15.365	35.664	1.00	53.06
ATOM	3904	C2	T U	11	34.499	15.624	35.889	1.00	52.68
ATOM	3905	O2	T U	11	34.014	16.743	35.827	1.00	53.22
ATOM	3906	N3	T U	11	33.748	14.541	36.203	1.00	48.27
ATOM	3907	C4	T U	11	34.176	13.244	36.317	1.00	50.62
ATOM	3908	O4	T U	11	33.373	12.372	36.565	1.00	56.88
ATOM	3909	C5	T U	11	35.598	13.038	36.111	1.00	48.35
ATOM	3910	C5M	T U	11	36.174	11.674	36.302	1.00	49.06
ATOM	3911	C6	T U	11	36.338	14.091	35.781	1.00	50.27
ATOM	3912	P	G U	12	39.600	18.998	38.085	1.00	56.62
ATOM	3913	O1P	G U	12	40.874	19.785	38.057	1.00	60.50
ATOM	3914	O2P	G U	12	39.426	17.927	39.096	1.00	57.79
ATOM	3915	O5*	G U	12	38.401	20.029	38.255	1.00	58.01
ATOM	3916	C5*	G U	12	38.214	21.118	37.317	1.00	61.18
ATOM	3917	C4*	G U	12	36.939	21.876	37.632	1.00	60.67
ATOM	3918	O4*	G U	12	35.809	20.972	37.619	1.00	62.41
ATOM	3919	C3*	G U	12	36.895	22.540	39.006	1.00	62.67
ATOM	3920	O3*	G U	12	36.116	23.731	38.914	1.00	62.66
ATOM	3921	C2*	G U	12	36.216	21.504	39.884	1.00	60.54
ATOM	3922	C1*	G U	12	35.219	20.879	38.920	1.00	57.47
ATOM	3923	N9	G U	12	34.948	19.472	39.172	1.00	48.39
ATOM	3924	C8	G U	12	35.873	18.486	39.397	1.00	42.62
ATOM	3925	N7	G U	12	35.338	17.304	39.503	1.00	41.38
ATOM	3926	C5	G U	12	33.979	17.524	39.372	1.00	38.25
ATOM	3927	C6	G U	12	32.894	16.601	39.376	1.00	41.36
ATOM	3928	O6	G U	12	32.928	15.374	39.475	1.00	37.80
ATOM	3929	N1	G U	12	31.676	17.250	39.216	1.00	39.48
ATOM	3930	C2	G U	12	31.523	18.597	39.043	1.00	45.11
ATOM	3931	N2	G U	12	30.268	19.016	38.908	1.00	44.09
ATOM	3932	N3	G U	12	32.531	19.469	39.010	1.00	45.38
ATOM	3933	C4	G U	12	33.721	18.862	39.185	1.00	43.07
ATOM	3934	P	A U	13	35.887	24.640	40.220	1.00	64.61
ATOM	3935	O1P	A U	13	35.546	26.014	39.696	1.00	64.25
ATOM	3936	O2P	A U	13	37.035	24.464	41.173	1.00	62.39
ATOM	3937	O5*	A U	13	34.611	23.982	40.913	1.00	62.90
ATOM	3938	C5*	A U	13	33.274	24.481	40.661	1.00	55.51
ATOM	3939	C4*	A U	13	32.339	23.951	41.718	1.00	50.34
ATOM	3940	O4*	A U	13	32.290	22.506	41.581	1.00	51.25
ATOM	3941	C3*	A U	13	32.815	24.206	43.156	1.00	48.97
ATOM	3942	O3*	A U	13	31.700	24.345	44.048	1.00	51.60
ATOM	3943	C2*	A U	13	33.507	22.901	43.511	1.00	45.47
ATOM	3944	C1*	A U	13	32.546	21.942	42.846	1.00	44.90
ATOM	3945	N9	A U	13	33.009	20.572	42.660	1.00	40.27
ATOM	3946	C8	A U	13	34.289	20.105	42.640	1.00	40.72
ATOM	3947	N7	A U	13	34.371	18.800	42.579	1.00	40.53
ATOM	3948	C5	A U	13	33.055	18.383	42.539	1.00	35.47
ATOM	3949	C6	A U	13	32.475	17.121	42.509	1.00	35.25
ATOM	3950	N6	A U	13	33.163	15.999	42.582	1.00	42.49
ATOM	3951	N1	A U	13	31.142	17.049	42.426	1.00	39.34
ATOM	3952	C2	A U	13	30.442	18.178	42.404	1.00	38.81
ATOM	3953	N3	A U	13	30.868	19.427	42.464	1.00	38.58
ATOM	3954	C4	A U	13	32.203	19.462	42.536	1.00	36.68
ATOM	3955	P	A U	14	30.782	25.675	44.021	1.00	53.44
ATOM	3956	O1P	A U	14	30.638	26.086	42.598	1.00	49.90
ATOM	3957	O2P	A U	14	31.226	26.670	45.026	1.00	57.09

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ATOM	3958	O5*	A U	14	29.414	25.106	44.558	1.00	51.03
ATOM	3959	C5*	A U	14	28.644	24.237	43.739	1.00	53.92
ATOM	3960	C4*	A U	14	27.983	23.174	44.579	1.00	52.95
ATOM	3961	O4*	A U	14	28.719	21.929	44.609	1.00	51.99
ATOM	3962	C3*	A U	14	27.765	23.559	46.033	1.00	53.25
ATOM	3963	O3*	A U	14	26.494	23.089	46.416	1.00	55.37
ATOM	3964	C2*	A U	14	28.800	22.739	46.774	1.00	50.39
ATOM	3965	C1*	A U	14	28.760	21.474	45.951	1.00	49.90
ATOM	3966	N9	A U	14	29.936	20.619	46.089	1.00	43.33
ATOM	3967	C8	A U	14	31.210	21.045	46.252	1.00	41.11
ATOM	3968	N7	A U	14	32.086	20.078	46.268	1.00	45.59
ATOM	3969	C5	A U	14	31.329	18.934	46.114	1.00	36.35
ATOM	3970	C6	A U	14	31.677	17.579	46.013	1.00	38.70
ATOM	3971	N6	A U	14	32.933	17.146	46.066	1.00	41.09
ATOM	3972	N1	A U	14	30.683	16.683	45.851	1.00	37.30
ATOM	3973	C2	A U	14	29.432	17.128	45.810	1.00	34.65
ATOM	3974	N3	A U	14	28.981	18.378	45.891	1.00	39.26
ATOM	3975	C4	A U	14	29.996	19.242	46.033	1.00	37.50
ATOM	3976	P	A U	15	26.050	23.248	47.930	1.00	58.54
ATOM	3977	O1P	A U	15	25.070	24.333	47.986	1.00	60.05
ATOM	3978	O2P	A U	15	27.273	23.311	48.786	1.00	56.57
ATOM	3979	O5*	A U	15	25.289	21.884	48.192	1.00	57.70
ATOM	3980	C5*	A U	15	24.707	21.170	47.102	1.00	55.80
ATOM	3981	C4*	A U	15	24.601	19.713	47.468	1.00	58.16
ATOM	3982	O4*	A U	15	25.917	19.109	47.462	1.00	57.03
ATOM	3983	C3*	A U	15	24.037	19.485	48.873	1.00	56.88
ATOM	3984	O3*	A U	15	23.220	18.321	48.837	1.00	59.80
ATOM	3985	C2*	A U	15	25.274	19.245	49.712	1.00	54.60
ATOM	3986	C1*	A U	15	26.181	18.518	48.726	1.00	54.01
ATOM	3987	N9	A U	15	27.620	18.652	48.989	1.00	51.02
ATOM	3988	C8	A U	15	28.310	19.805	49.278	1.00	49.87
ATOM	3989	N7	A U	15	29.598	19.619	49.451	1.00	47.98
ATOM	3990	C5	A U	15	29.767	18.259	49.266	1.00	40.86
ATOM	3991	C6	A U	15	30.902	17.443	49.303	1.00	39.59
ATOM	3992	N6	A U	15	32.132	17.900	49.536	1.00	41.97
ATOM	3993	N1	A U	15	30.733	16.130	49.076	1.00	44.21
ATOM	3994	C2	A U	15	29.499	15.672	48.819	1.00	46.35
ATOM	3995	N3	A U	15	28.349	16.343	48.751	1.00	46.55
ATOM	3996	C4	A U	15	28.557	17.647	48.987	1.00	46.40
ATOM	3997	P	A U	16	22.285	17.945	50.085	1.00	60.69
ATOM	3998	O1P	A U	16	20.945	17.585	49.512	1.00	58.71
ATOM	3999	O2P	A U	16	22.385	18.978	51.145	1.00	58.76
ATOM	4000	O5*	A U	16	22.963	16.601	50.560	1.00	57.97
ATOM	4001	C5*	A U	16	23.274	15.626	49.589	1.00	57.37
ATOM	4002	C4*	A U	16	24.237	14.629	50.168	1.00	59.57
ATOM	4003	O4*	A U	16	25.558	15.224	50.293	1.00	58.23
ATOM	4004	C3*	A U	16	23.838	14.135	51.560	1.00	59.63
ATOM	4005	O3*	A U	16	23.815	12.703	51.539	1.00	65.47
ATOM	4006	C2*	A U	16	24.930	14.693	52.467	1.00	57.97
ATOM	4007	C1*	A U	16	26.120	14.800	51.521	1.00	55.90
ATOM	4008	N9	A U	16	27.162	15.756	51.898	1.00	50.10
ATOM	4009	C8	A U	16	26.992	17.060	52.259	1.00	46.71
ATOM	4010	N7	A U	16	28.116	17.682	52.538	1.00	50.39
ATOM	4011	C5	A U	16	29.094	16.721	52.348	1.00	47.88
ATOM	4012	C6	A U	16	30.499	16.757	52.472	1.00	48.51
ATOM	4013	N6	A U	16	31.185	17.847	52.802	1.00	47.71
ATOM	4014	N1	A U	16	31.180	15.622	52.225	1.00	45.87
ATOM	4015	C2	A U	16	30.497	14.537	51.861	1.00	46.93
ATOM	4016	N3	A U	16	29.183	14.386	51.697	1.00	48.09
ATOM	4017	C4	A U	16	28.526	15.529	51.960	1.00	49.70
ATOM	4018	P	A U	17	23.451	11.870	52.865	1.00	67.92
ATOM	4019	O1P	A U	17	22.199	11.103	52.570	1.00	65.05
ATOM	4020	O2P	A U	17	23.509	12.776	54.064	1.00	66.12

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ATOM	4021	O5*	A U	17	24.695	10.885	52.987	1.00	63.94
ATOM	4022	C5*	A U	17	25.995	11.427	52.794	1.00	62.46
ATOM	4023	C4*	A U	17	27.045	10.468	53.282	1.00	60.53
ATOM	4024	O4*	A U	17	28.250	11.238	53.465	1.00	60.34
ATOM	4025	C3*	A U	17	26.734	9.881	54.645	1.00	61.42
ATOM	4026	O3*	A U	17	27.300	8.572	54.681	1.00	65.72
ATOM	4027	C2*	A U	17	27.383	10.856	55.614	1.00	58.77
ATOM	4028	C1*	A U	17	28.565	11.425	54.831	1.00	56.12
ATOM	4029	N9	A U	17	28.783	12.864	55.048	1.00	52.84
ATOM	4030	C8	A U	17	27.807	13.824	55.213	1.00	47.40
ATOM	4031	N7	A U	17	28.278	15.027	55.428	1.00	46.79
ATOM	4032	C5	A U	17	29.654	14.864	55.388	1.00	46.22
ATOM	4033	C6	A U	17	30.705	15.773	55.542	1.00	47.97
ATOM	4034	N6	A U	17	30.524	17.066	55.754	1.00	52.85
ATOM	4035	N1	A U	17	31.967	15.300	55.457	1.00	50.07
ATOM	4036	C2	A U	17	32.140	13.999	55.203	1.00	49.23
ATOM	4037	N3	A U	17	31.226	13.043	55.029	1.00	48.87
ATOM	4038	C4	A U	17	29.982	13.544	55.145	1.00	48.35
ATOM	4039	N1	SIU U	18	30.775	11.758	58.351	1.00	63.23
ATOM	4040	C2	SIU U	18	31.591	12.852	58.485	1.00	60.57
ATOM	4041	N3	SIU U	18	30.940	14.017	58.822	1.00	57.63
ATOM	4042	C4	SIU U	18	29.588	14.179	59.048	1.00	59.30
ATOM	4043	C5	SIU U	18	28.780	12.979	58.876	1.00	59.16
ATOM	4044	C6	SIU U	18	29.409	11.846	58.540	1.00	62.00
ATOM	4045	O2	SIU U	18	32.797	12.798	58.330	1.00	53.60
ATOM	4046	O4	SIU U	18	29.160	15.274	59.370	1.00	64.97
ATOM	4047	I5	SIU U	18	26.844	13.088	59.130	0.33	70.79
ATOM	4048	C1*	SIU U	18	31.418	10.479	58.000	1.00	64.71
ATOM	4049	C2*	SIU U	18	30.911	9.282	58.774	1.00	66.74
ATOM	4050	C3*	SIU U	18	31.276	8.142	57.835	1.00	65.16
ATOM	4051	C4*	SIU U	18	31.174	8.756	56.451	1.00	64.87
ATOM	4052	O3*	SIU U	18	32.614	7.790	58.053	1.00	66.03
ATOM	4053	O4*	SIU U	18	31.095	10.187	56.656	1.00	67.29
ATOM	4054	C5*	SIU U	18	29.965	8.245	55.717	1.00	63.81
ATOM	4055	O5*	SIU U	18	28.872	8.213	56.607	1.00	63.49
ATOM	4056	P	SIU U	18	27.438	7.799	56.081	1.00	67.32
ATOM	4057	O1P	SIU U	18	27.425	6.344	55.764	1.00	69.10
ATOM	4058	O2P	SIU U	18	26.444	8.357	57.039	1.00	70.87
ATOM	4059	N1	SIU U	19	34.253	11.422	61.259	1.00	58.95
ATOM	4060	C2	SIU U	19	34.363	12.789	61.229	1.00	56.03
ATOM	4061	N3	SIU U	19	33.197	13.464	61.451	1.00	48.92
ATOM	4062	C4	SIU U	19	31.952	12.916	61.673	1.00	55.95
ATOM	4063	C5	SIU U	19	31.905	11.455	61.704	1.00	57.17
ATOM	4064	C6	SIU U	19	33.052	10.797	61.506	1.00	57.22
ATOM	4065	O2	SIU U	19	35.413	13.353	61.016	1.00	55.19
ATOM	4066	O4	SIU U	19	30.992	13.655	61.806	1.00	55.72
ATOM	4067	I5	SIU U	19	30.195	10.540	62.019	0.48	72.48
ATOM	4068	C1*	SIU U	19	35.472	10.652	60.993	1.00	60.97
ATOM	4069	C2*	SIU U	19	35.690	9.456	61.887	1.00	63.12
ATOM	4070	C3*	SIU U	19	36.573	8.582	61.006	1.00	65.22
ATOM	4071	C4*	SIU U	19	36.120	8.905	59.591	1.00	64.46
ATOM	4072	O3*	SIU U	19	37.935	8.952	61.137	1.00	65.41
ATOM	4073	O4*	SIU U	19	35.341	10.110	59.698	1.00	64.10
ATOM	4074	C5*	SIU U	19	35.312	7.811	58.941	1.00	62.58
ATOM	4075	O5*	SIU U	19	34.284	7.388	59.818	1.00	63.42
ATOM	4076	P	SIU U	19	32.949	6.775	59.219	1.00	67.21
ATOM	4077	O1P	SIU U	19	33.250	5.463	58.565	1.00	64.94
ATOM	4078	O2P	SIU U	19	31.836	6.886	60.225	1.00	64.63
ATOM	4079	N1	SIU U	20	35.621	13.067	64.913	1.00	58.00
ATOM	4080	C2	SIU U	20	34.661	14.066	65.019	1.00	60.57
ATOM	4081	N3	SIU U	20	33.369	13.621	65.119	1.00	60.07
ATOM	4082	C4	SIU U	20	32.937	12.314	65.127	1.00	66.05
ATOM	4083	C5	SIU U	20	33.981	11.315	65.033	1.00	66.46

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ATOM	4084	C6	SIU	U	20	35.262	11.729	64.932	1.00	62.04
ATOM	4085	O2	SIU	U	20	34.928	15.254	65.025	1.00	59.45
ATOM	4086	O4	SIU	U	20	31.731	12.057	65.206	1.00	62.10
ATOM	4087	I5	SIU	U	20	33.455	9.436	65.048	0.54	80.45
ATOM	4088	C1*	SIU	U	20	37.039	13.481	64.757	1.00	58.50
ATOM	4089	C2*	SIU	U	20	38.069	12.527	65.343	1.00	60.60
ATOM	4090	C3*	SIU	U	20	39.250	12.612	64.376	1.00	60.71
ATOM	4091	C4*	SIU	U	20	38.589	12.943	63.045	1.00	60.33
ATOM	4092	O3*	SIU	U	20	40.181	13.643	64.699	1.00	62.52
ATOM	4093	O4*	SIU	U	20	37.313	13.540	63.371	1.00	60.38
ATOM	4094	C5*	SIU	U	20	38.394	11.745	62.146	1.00	61.31
ATOM	4095	O5*	SIU	U	20	37.975	10.622	62.921	1.00	64.59
ATOM	4096	P	SIU	U	20	38.531	9.173	62.590	1.00	64.11
ATOM	4097	O1P	SIU	U	20	40.022	9.215	62.509	1.00	62.81
ATOM	4098	O2P	SIU	U	20	37.858	8.152	63.449	1.00	62.01
ATOM	4099	N1	SIU	U	21	36.272	15.715	68.253	1.00	59.99
ATOM	4100	C2	SIU	U	21	34.961	16.095	68.328	1.00	62.51
ATOM	4101	N3	SIU	U	21	34.057	15.052	68.279	1.00	62.36
ATOM	4102	C4	SIU	U	21	34.346	13.701	68.236	1.00	64.83
ATOM	4103	C5	SIU	U	21	35.751	13.373	68.298	1.00	69.51
ATOM	4104	C6	SIU	U	21	36.632	14.387	68.270	1.00	65.44
ATOM	4105	O2	SIU	U	21	34.624	17.260	68.460	1.00	60.95
ATOM	4106	O4	SIU	U	21	33.447	12.884	68.131	1.00	61.91
ATOM	4107	I5	SIU	U	21	36.280	11.489	68.455	0.44	85.21
ATOM	4108	C1*	SIU	U	21	37.279	16.772	68.113	1.00	62.69
ATOM	4109	C2*	SIU	U	21	38.436	16.676	69.088	1.00	64.82
ATOM	4110	C3*	SIU	U	21	39.553	17.380	68.330	1.00	64.67
ATOM	4111	C4*	SIU	U	21	39.240	17.098	66.866	1.00	63.45
ATOM	4112	O3*	SIU	U	21	39.433	18.773	68.530	1.00	65.69
ATOM	4113	O4*	SIU	U	21	37.864	16.634	66.822	1.00	64.65
ATOM	4114	C5*	SIU	U	21	40.185	16.151	66.168	1.00	63.05
ATOM	4115	O5*	SIU	U	21	40.281	14.910	66.870	1.00	62.91
ATOM	4116	P	SIU	U	21	40.918	13.649	66.132	1.00	66.07
ATOM	4117	O1P	SIU	U	21	42.359	13.957	65.871	1.00	61.96
ATOM	4118	O2P	SIU	U	21	40.541	12.415	66.886	1.00	65.25
ATOM	4119	P	T	U	22	40.520	19.543	69.418	1.00	68.53
ATOM	4120	O1P	T	U	22	41.284	20.426	68.475	1.00	69.60
ATOM	4121	O2P	T	U	22	41.250	18.594	70.306	1.00	71.07
ATOM	4122	O5*	T	U	22	39.597	20.458	70.316	1.00	66.16
ATOM	4123	C5*	T	U	22	38.691	21.365	69.693	1.00	62.91
ATOM	4124	C4*	T	U	22	37.495	21.611	70.584	1.00	63.77
ATOM	4125	O4*	T	U	22	36.500	20.583	70.418	1.00	59.11
ATOM	4126	C3*	T	U	22	37.798	21.700	72.091	1.00	65.53
ATOM	4127	O3*	T	U	22	37.056	22.733	72.729	1.00	69.63
ATOM	4128	C2*	T	U	22	37.178	20.431	72.638	1.00	63.68
ATOM	4129	C1*	T	U	22	35.999	20.274	71.698	1.00	58.75
ATOM	4130	N1	T	U	22	35.534	18.917	71.662	1.00	55.22
ATOM	4131	C2	T	U	22	34.184	18.688	71.656	1.00	52.01
ATOM	4132	O2	T	U	22	33.355	19.579	71.667	1.00	49.90
ATOM	4133	N3	T	U	22	33.840	17.376	71.645	1.00	48.00
ATOM	4134	C4	T	U	22	34.692	16.296	71.643	1.00	50.26
ATOM	4135	O4	T	U	22	34.229	15.170	71.640	1.00	52.88
ATOM	4136	C5	T	U	22	36.113	16.620	71.645	1.00	51.83
ATOM	4137	C5M	T	U	22	37.132	15.522	71.654	1.00	50.63
ATOM	4138	C6	T	U	22	36.450	17.899	71.647	1.00	53.36
ATOM	4140	O5*	A	V	1	24.535	14.133	72.087	1.00	76.66
ATOM	4141	C5*	A	V	1	23.633	14.703	73.063	1.00	71.97
ATOM	4142	C4*	A	V	1	23.894	16.189	73.048	1.00	68.15
ATOM	4143	O4*	A	V	1	25.317	16.367	73.198	1.00	66.44
ATOM	4144	C3*	A	V	1	23.533	16.848	71.718	1.00	67.16
ATOM	4145	O3*	A	V	1	23.010	18.162	71.944	1.00	67.04
ATOM	4146	C2*	A	V	1	24.837	16.819	70.923	1.00	63.88
ATOM	4147	C1*	A	V	1	25.920	16.868	71.994	1.00	61.83

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ATOM	4148	N9	A V	1	27.106	16.045	71.728	1.00	52.83
ATOM	4149	C8	A V	1	27.115	14.712	71.432	1.00	47.08
ATOM	4150	N7	A V	1	28.314	14.207	71.312	1.00	43.68
ATOM	4151	C5	A V	1	29.157	15.282	71.529	1.00	45.02
ATOM	4152	C6	A V	1	30.551	15.394	71.560	1.00	46.43
ATOM	4153	N6	A V	1	31.376	14.373	71.382	1.00	49.75
ATOM	4154	N1	A V	1	31.082	16.608	71.799	1.00	49.85
ATOM	4155	C2	A V	1	30.258	17.626	72.007	1.00	51.80
ATOM	4156	N3	A V	1	28.928	17.647	72.017	1.00	51.78
ATOM	4157	C4	A V	1	28.430	16.426	71.768	1.00	48.23
ATOM	4158	P	A V	2	22.377	18.994	70.715	1.00	68.28
ATOM	4159	O1P	A V	2	21.287	19.874	71.229	1.00	67.27
ATOM	4160	O2P	A V	2	22.086	18.030	69.605	1.00	64.64
ATOM	4161	O5*	A V	2	23.589	19.925	70.290	1.00	64.22
ATOM	4162	C5*	A V	2	24.931	19.484	70.516	1.00	63.40
ATOM	4163	C4*	A V	2	25.896	20.551	70.083	1.00	63.79
ATOM	4164	O4*	A V	2	27.216	19.964	70.111	1.00	63.28
ATOM	4165	C3*	A V	2	25.667	21.003	68.641	1.00	66.40
ATOM	4166	O3*	A V	2	25.955	22.393	68.530	1.00	69.72
ATOM	4167	C2*	A V	2	26.636	20.171	67.826	1.00	64.45
ATOM	4168	C1*	A V	2	27.769	19.877	68.802	1.00	61.55
ATOM	4169	N9	A V	2	28.272	18.519	68.640	1.00	56.87
ATOM	4170	C8	A V	2	27.523	17.388	68.437	1.00	55.84
ATOM	4171	N7	A V	2	28.239	16.297	68.321	1.00	54.94
ATOM	4172	C5	A V	2	29.545	16.741	68.455	1.00	48.56
ATOM	4173	C6	A V	2	30.771	16.075	68.420	1.00	45.96
ATOM	4174	N6	A V	2	30.886	14.773	68.180	1.00	44.62
ATOM	4175	N1	A V	2	31.888	16.799	68.621	1.00	45.42
ATOM	4176	C2	A V	2	31.768	18.112	68.811	1.00	45.34
ATOM	4177	N3	A V	2	30.667	18.861	68.839	1.00	44.76
ATOM	4178	C4	A V	2	29.580	18.107	68.658	1.00	48.82
ATOM	4179	P	A V	3	26.100	23.067	67.082	1.00	72.54
ATOM	4180	O1P	A V	3	25.785	24.526	67.274	1.00	72.45
ATOM	4181	O2P	A V	3	25.285	22.249	66.107	1.00	72.49
ATOM	4182	O5*	A V	3	27.660	22.879	66.752	1.00	70.86
ATOM	4183	C5*	A V	3	28.643	23.487	67.611	1.00	72.49
ATOM	4184	C4*	A V	3	30.036	23.343	67.045	1.00	71.96
ATOM	4185	O4*	A V	3	30.400	21.949	67.071	1.00	72.19
ATOM	4186	C3*	A V	3	30.272	23.839	65.613	1.00	72.84
ATOM	4187	O3*	A V	3	31.445	24.658	65.555	1.00	73.33
ATOM	4188	C2*	A V	3	30.467	22.562	64.806	1.00	71.32
ATOM	4189	C1*	A V	3	30.953	21.552	65.827	1.00	68.96
ATOM	4190	N9	A V	3	30.500	20.183	65.566	1.00	64.96
ATOM	4191	C8	A V	3	29.230	19.746	65.274	1.00	62.87
ATOM	4192	N7	A V	3	29.150	18.449	65.078	1.00	59.46
ATOM	4193	C5	A V	3	30.452	18.003	65.256	1.00	58.18
ATOM	4194	C6	A V	3	31.031	16.727	65.188	1.00	56.55
ATOM	4195	N6	A V	3	30.340	15.629	64.932	1.00	55.50
ATOM	4196	N1	A V	3	32.362	16.621	65.409	1.00	55.82
ATOM	4197	C2	A V	3	33.048	17.735	65.703	1.00	56.63
ATOM	4198	N3	A V	3	32.611	18.989	65.808	1.00	56.54
ATOM	4199	C4	A V	3	31.294	19.057	65.565	1.00	59.70
ATOM	4200	P	A V	4	32.084	25.052	64.122	1.00	76.35
ATOM	4201	O1P	A V	4	32.635	26.436	64.269	1.00	76.63
ATOM	4202	O2P	A V	4	31.168	24.751	62.985	1.00	77.49
ATOM	4203	O5*	A V	4	33.300	24.044	63.998	1.00	74.77
ATOM	4204	C5*	A V	4	34.256	23.928	65.056	1.00	72.00
ATOM	4205	C4*	A V	4	35.408	23.080	64.588	1.00	70.29
ATOM	4206	O4*	A V	4	34.944	21.718	64.450	1.00	69.84
ATOM	4207	C3*	A V	4	35.909	23.498	63.210	1.00	69.98
ATOM	4208	O3*	A V	4	37.313	23.306	63.119	1.00	71.92
ATOM	4209	C2*	A V	4	35.188	22.554	62.265	1.00	69.02
ATOM	4210	C1*	A V	4	35.033	21.287	63.099	1.00	66.56

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ATOM	4211	N9	A V	4	33.822	20.517	62.797	1.00	62.08
ATOM	4212	C8	A V	4	32.553	21.007	62.557	1.00	57.77
ATOM	4213	N7	A V	4	31.662	20.073	62.310	1.00	54.10
ATOM	4214	C5	A V	4	32.387	18.883	62.403	1.00	56.55
ATOM	4215	C6	A V	4	32.014	17.508	62.262	1.00	52.98
ATOM	4216	N6	A V	4	30.782	17.099	61.946	1.00	49.36
ATOM	4217	N1	A V	4	32.976	16.575	62.448	1.00	51.20
ATOM	4218	C2	A V	4	34.224	16.989	62.728	1.00	51.55
ATOM	4219	N3	A V	4	34.699	18.237	62.868	1.00	51.82
ATOM	4220	C4	A V	4	33.719	19.145	62.698	1.00	56.28
ATOM	4221	P	A V	5	38.053	23.559	61.720	1.00	73.15
ATOM	4222	O1P	A V	5	39.221	24.468	61.950	1.00	75.39
ATOM	4223	O2P	A V	5	36.987	23.944	60.736	1.00	74.72
ATOM	4224	O5*	A V	5	38.651	22.127	61.333	1.00	71.83
ATOM	4225	C5*	A V	5	37.805	20.977	61.250	1.00	65.95
ATOM	4226	C4*	A V	5	38.615	19.748	60.911	1.00	63.53
ATOM	4227	O4*	A V	5	37.680	18.655	60.841	1.00	61.73
ATOM	4228	C3*	A V	5	39.295	19.794	59.550	1.00	62.26
ATOM	4229	O3*	A V	5	40.478	18.991	59.565	1.00	64.50
ATOM	4230	C2*	A V	5	38.237	19.237	58.620	1.00	60.59
ATOM	4231	C1*	A V	5	37.387	18.322	59.502	1.00	57.45
ATOM	4232	N9	A V	5	35.952	18.520	59.313	1.00	52.80
ATOM	4233	C8	A V	5	35.285	19.714	59.132	1.00	51.20
ATOM	4234	N7	A V	5	33.994	19.581	58.964	1.00	48.84
ATOM	4235	C5	A V	5	33.790	18.206	59.049	1.00	44.83
ATOM	4236	C6	A V	5	32.640	17.422	58.950	1.00	43.01
ATOM	4237	N6	A V	5	31.427	17.922	58.748	1.00	48.30
ATOM	4238	N1	A V	5	32.777	16.085	59.071	1.00	46.23
ATOM	4239	C2	A V	5	34.000	15.588	59.298	1.00	45.40
ATOM	4240	N3	A V	5	35.157	16.224	59.415	1.00	44.18
ATOM	4241	C4	A V	5	34.983	17.547	59.272	1.00	47.10
ATOM	4242	P	T V	6	41.537	19.108	58.352	1.00	67.91
ATOM	4243	O1P	T V	6	42.941	18.972	58.863	1.00	68.00
ATOM	4244	O2P	T V	6	41.168	20.302	57.543	1.00	67.05
ATOM	4245	O5*	T V	6	41.210	17.818	57.492	1.00	65.19
ATOM	4246	C5*	T V	6	39.870	17.353	57.380	1.00	59.88
ATOM	4247	C4*	T V	6	39.861	15.882	57.054	1.00	58.51
ATOM	4248	O4*	T V	6	38.511	15.438	57.256	1.00	54.67
ATOM	4249	C3*	T V	6	40.219	15.539	55.608	1.00	60.36
ATOM	4250	O3*	T V	6	41.003	14.339	55.559	1.00	66.17
ATOM	4251	C2*	T V	6	38.877	15.383	54.917	1.00	57.87
ATOM	4252	C1*	T V	6	37.869	15.136	56.036	1.00	55.21
ATOM	4253	N1	T V	6	36.744	16.057	55.929	1.00	51.20
ATOM	4254	C2	T V	6	35.470	15.566	55.986	1.00	51.71
ATOM	4255	O2	T V	6	35.236	14.383	56.095	1.00	55.42
ATOM	4256	N3	T V	6	34.475	16.516	55.900	1.00	46.74
ATOM	4257	C4	T V	6	34.644	17.877	55.757	1.00	47.73
ATOM	4258	O4	T V	6	33.662	18.614	55.697	1.00	45.86
ATOM	4259	C5	T V	6	36.029	18.322	55.690	1.00	48.39
ATOM	4260	C5M	T V	6	36.322	19.779	55.520	1.00	49.13
ATOM	4261	C6	T V	6	36.993	17.399	55.782	1.00	49.19
ATOM	4262	N1	SIU V	7	35.693	13.492	52.656	1.00	55.96
ATOM	4263	C2	SIU V	7	34.315	13.588	52.724	1.00	51.74
ATOM	4264	N3	SIU V	7	33.828	14.851	52.606	1.00	49.58
ATOM	4265	C4	SIU V	7	34.539	15.996	52.397	1.00	51.94
ATOM	4266	C5	SIU V	7	35.952	15.828	52.296	1.00	53.24
ATOM	4267	C6	SIU V	7	36.463	14.605	52.450	1.00	55.13
ATOM	4268	O2	SIU V	7	33.581	12.645	52.862	1.00	47.53
ATOM	4269	O4	SIU V	7	33.961	17.072	52.311	1.00	47.42
ATOM	4270	I5	SIU V	7	37.036	17.397	51.913	0.29	76.59
ATOM	4271	C1*	SIU V	7	36.338	12.164	52.804	1.00	60.34
ATOM	4272	C2*	SIU V	7	37.504	11.902	51.867	1.00	62.36
ATOM	4273	C3*	SIU V	7	38.338	10.890	52.643	1.00	63.83

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ATOM	4274	C4*	SIU	V	7	38.050	11.217	54.104	1.00	62.51
ATOM	4275	O3*	SIU	V	7	37.953	9.541	52.387	1.00	55.67
ATOM	4276	O4*	SIU	V	7	36.898	12.093	54.108	1.00	61.99
ATOM	4277	C5*	SIU	V	7	39.210	11.901	54.765	1.00	64.01
ATOM	4278	O5*	SIU	V	7	39.686	12.950	53.935	1.00	65.72
ATOM	4279	P	SIU	V	7	41.147	13.528	54.183	1.00	67.90
ATOM	4280	O1P	SIU	V	7	42.069	12.360	54.394	1.00	67.87
ATOM	4281	O2P	SIU	V	7	41.445	14.528	53.114	1.00	70.40
ATOM	4282	N1	SIU	V	8	33.237	11.819	49.659	1.00	47.68
ATOM	4283	C2	SIU	V	8	32.177	12.698	49.482	1.00	47.08
ATOM	4284	N3	SIU	V	8	32.529	13.983	49.256	1.00	44.50
ATOM	4285	C4	SIU	V	8	33.799	14.476	49.157	1.00	53.99
ATOM	4286	C5	SIU	V	8	34.851	13.496	49.314	1.00	54.84
ATOM	4287	C6	SIU	V	8	34.521	12.239	49.562	1.00	52.26
ATOM	4288	O2	SIU	V	8	31.019	12.366	49.500	1.00	50.14
ATOM	4289	O4	SIU	V	8	33.972	15.675	48.950	1.00	55.87
ATOM	4290	I5	SIU	V	8	36.694	14.065	49.142	0.38	72.98
ATOM	4291	C1*	SIU	V	8	32.984	10.413	49.970	1.00	47.85
ATOM	4292	C2*	SIU	V	8	33.487	9.464	48.914	1.00	47.79
ATOM	4293	C3*	SIU	V	8	33.592	8.185	49.715	1.00	49.05
ATOM	4294	C4*	SIU	V	8	33.956	8.668	51.114	1.00	49.44
ATOM	4295	O3*	SIU	V	8	32.339	7.514	49.752	1.00	47.96
ATOM	4296	O4*	SIU	V	8	33.729	10.091	51.115	1.00	43.49
ATOM	4297	C5*	SIU	V	8	35.391	8.413	51.500	1.00	54.33
ATOM	4298	O5*	SIU	V	8	36.282	9.090	50.601	1.00	62.44
ATOM	4299	P	SIU	V	8	37.850	9.011	50.870	1.00	65.20
ATOM	4300	O1P	SIU	V	8	38.220	7.570	50.957	1.00	64.48
ATOM	4301	O2P	SIU	V	8	38.631	9.937	49.980	1.00	62.50
ATOM	4302	N1	SIU	V	9	29.609	11.925	46.555	1.00	54.54
ATOM	4303	C2	SIU	V	9	29.218	13.251	46.741	1.00	55.53
ATOM	4304	N3	SIU	V	9	30.224	14.157	46.578	1.00	50.52
ATOM	4305	C4	SIU	V	9	31.531	13.881	46.282	1.00	52.03
ATOM	4306	C5	SIU	V	9	31.842	12.519	46.127	1.00	48.01
ATOM	4307	C6	SIU	V	9	30.897	11.611	46.253	1.00	51.16
ATOM	4308	O2	SIU	V	9	28.078	13.606	47.026	1.00	61.03
ATOM	4309	O4	SIU	V	9	32.341	14.775	46.171	1.00	49.76
ATOM	4310	I5	SIU	V	9	33.672	12.081	45.763	0.45	70.92
ATOM	4311	C1*	SIU	V	9	28.629	10.844	46.700	1.00	53.45
ATOM	4312	C2*	SIU	V	9	28.834	9.659	45.782	1.00	54.68
ATOM	4313	C3*	SIU	V	9	28.080	8.580	46.541	1.00	56.57
ATOM	4314	C4*	SIU	V	9	28.300	8.954	48.009	1.00	55.63
ATOM	4315	O3*	SIU	V	9	26.675	8.665	46.270	1.00	60.55
ATOM	4316	O4*	SIU	V	9	28.776	10.313	47.993	1.00	55.22
ATOM	4317	C5*	SIU	V	9	29.301	8.123	48.771	1.00	53.23
ATOM	4318	O5*	SIU	V	9	30.575	8.221	48.157	1.00	51.10
ATOM	4319	P	SIU	V	9	31.646	7.071	48.380	1.00	50.04
ATOM	4320	O1P	SIU	V	9	30.907	5.833	48.674	1.00	52.03
ATOM	4321	O2P	SIU	V	9	32.574	7.125	47.221	1.00	48.09
ATOM	4322	N1	SIU	V	10	27.413	13.565	43.331	1.00	48.88
ATOM	4323	C2	SIU	V	10	28.038	14.791	43.262	1.00	45.77
ATOM	4324	N3	SIU	V	10	29.393	14.729	43.104	1.00	39.18
ATOM	4325	C4	SIU	V	10	30.153	13.603	42.973	1.00	42.30
ATOM	4326	C5	SIU	V	10	29.431	12.369	43.006	1.00	44.43
ATOM	4327	C6	SIU	V	10	28.119	12.403	43.190	1.00	48.66
ATOM	4328	O2	SIU	V	10	27.449	15.847	43.324	1.00	49.68
ATOM	4329	O4	SIU	V	10	31.342	13.699	42.846	1.00	42.82
ATOM	4330	I5	SIU	V	10	30.399	10.711	42.779	0.33	67.70
ATOM	4331	C1*	SIU	V	10	25.972	13.488	43.589	1.00	52.20
ATOM	4332	C2*	SIU	V	10	25.226	12.556	42.658	1.00	52.13
ATOM	4333	C3*	SIU	V	10	24.043	12.139	43.519	1.00	55.80
ATOM	4334	C4*	SIU	V	10	24.600	12.127	44.933	1.00	56.69
ATOM	4335	O3*	SIU	V	10	22.997	13.100	43.447	1.00	56.21
ATOM	4336	O4*	SIU	V	10	25.797	12.939	44.887	1.00	55.40

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ATOM	4337	C5*	SIU	V	10	24.911	10.741	45.440	1.00	57.47
ATOM	4338	O5*	SIU	V	10	25.631	10.022	44.445	1.00	61.28
ATOM	4339	P	SIU	V	10	26.141	8.553	44.757	1.00	63.04
ATOM	4340	O1P	SIU	V	10	24.967	7.651	44.848	1.00	65.66
ATOM	4341	O2P	SIU	V	10	27.251	8.239	43.825	1.00	58.90
ATOM	4342	P	C	V	11	22.249	13.320	42.056	1.00	56.27
ATOM	4343	O1P	C	V	11	20.869	13.776	42.409	1.00	56.21
ATOM	4344	O2P	C	V	11	22.466	12.140	41.226	1.00	59.20
ATOM	4345	O5*	C	V	11	23.063	14.509	41.403	1.00	51.18
ATOM	4346	C5*	C	V	11	22.996	15.786	41.968	1.00	45.99
ATOM	4347	C4*	C	V	11	23.726	16.747	41.079	1.00	45.18
ATOM	4348	O4*	C	V	11	25.135	16.419	41.124	1.00	44.58
ATOM	4349	C3*	C	V	11	23.296	16.596	39.626	1.00	42.23
ATOM	4350	O3*	C	V	11	23.038	17.881	39.090	1.00	40.24
ATOM	4351	C2*	C	V	11	24.494	15.919	38.967	1.00	41.43
ATOM	4352	C1*	C	V	11	25.647	16.390	39.828	1.00	37.65
ATOM	4353	N1	C	V	11	26.840	15.544	39.836	1.00	37.44
ATOM	4354	C2	C	V	11	28.088	16.151	39.684	1.00	42.56
ATOM	4355	O2	C	V	11	28.152	17.378	39.632	1.00	45.75
ATOM	4356	N3	C	V	11	29.189	15.390	39.616	1.00	38.87
ATOM	4357	C4	C	V	11	29.089	14.071	39.712	1.00	37.42
ATOM	4358	N4	C	V	11	30.205	13.368	39.635	1.00	40.28
ATOM	4359	C5	C	V	11	27.838	13.422	39.895	1.00	37.51
ATOM	4360	C6	C	V	11	26.744	14.191	39.957	1.00	35.37
ATOM	4361	P	A	V	12	22.040	18.034	37.846	1.00	44.33
ATOM	4362	O1P	A	V	12	21.150	19.151	38.185	1.00	40.46
ATOM	4363	O2P	A	V	12	21.460	16.744	37.456	1.00	42.33
ATOM	4364	O5*	A	V	12	23.010	18.482	36.660	1.00	38.87
ATOM	4365	C5*	A	V	12	23.834	19.637	36.811	1.00	34.93
ATOM	4366	C4*	A	V	12	25.042	19.521	35.921	1.00	35.66
ATOM	4367	O4*	A	V	12	25.998	18.535	36.421	1.00	35.84
ATOM	4368	C3*	A	V	12	24.706	19.099	34.491	1.00	34.13
ATOM	4369	O3*	A	V	12	25.543	19.840	33.596	1.00	33.13
ATOM	4370	C2*	A	V	12	25.139	17.644	34.469	1.00	30.75
ATOM	4371	C1*	A	V	12	26.395	17.761	35.312	1.00	35.09
ATOM	4372	N9	A	V	12	27.004	16.519	35.787	1.00	38.72
ATOM	4373	C8	A	V	12	26.402	15.314	36.027	1.00	39.10
ATOM	4374	N7	A	V	12	27.251	14.352	36.310	1.00	39.68
ATOM	4375	C5	A	V	12	28.484	14.972	36.276	1.00	37.99
ATOM	4376	C6	A	V	12	29.783	14.483	36.439	1.00	39.82
ATOM	4377	N6	A	V	12	30.058	13.200	36.652	1.00	42.75
ATOM	4378	N1	A	V	12	30.804	15.361	36.360	1.00	42.99
ATOM	4379	C2	A	V	12	30.516	16.648	36.111	1.00	45.64
ATOM	4380	N3	A	V	12	29.331	17.224	35.911	1.00	40.97
ATOM	4381	C4	A	V	12	28.345	16.322	36.004	1.00	38.09
ATOM	4382	P	A	V	13	24.930	21.042	32.744	1.00	32.50
ATOM	4383	O1P	A	V	13	24.178	21.858	33.670	1.00	32.35
ATOM	4384	O2P	A	V	13	24.259	20.442	31.613	1.00	24.30
ATOM	4385	O5*	A	V	13	26.185	21.878	32.300	1.00	29.82
ATOM	4386	C5*	A	V	13	26.906	22.627	33.265	1.00	31.57
ATOM	4387	C4*	A	V	13	28.379	22.521	32.973	1.00	32.51
ATOM	4388	O4*	A	V	13	28.945	21.227	33.311	1.00	28.92
ATOM	4389	C3*	A	V	13	28.714	22.738	31.508	1.00	27.97
ATOM	4390	O3*	A	V	13	29.916	23.465	31.539	1.00	30.03
ATOM	4391	C2*	A	V	13	28.955	21.332	30.978	1.00	24.14
ATOM	4392	C1*	A	V	13	29.604	20.668	32.180	1.00	28.95
ATOM	4393	N9	A	V	13	29.463	19.208	32.254	1.00	31.50
ATOM	4394	C8	A	V	13	28.301	18.507	32.114	1.00	33.77
ATOM	4395	N7	A	V	13	28.443	17.213	32.246	1.00	30.01
ATOM	4396	C5	A	V	13	29.786	17.047	32.481	1.00	26.93
ATOM	4397	C6	A	V	13	30.558	15.909	32.702	1.00	25.82
ATOM	4398	N6	A	V	13	30.055	14.689	32.754	1.00	27.92
ATOM	4399	N1	A	V	13	31.877	16.070	32.885	1.00	28.43



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ATOM	4400	C2	A V	13	32.376	17.301	32.862	1.00	31.42
ATOM	4401	N3	A V	13	31.753	18.457	32.679	1.00	32.07
ATOM	4402	C4	A V	13	30.438	18.264	32.488	1.00	29.66
ATOM	4403	P	A V	14	30.524	24.030	30.187	1.00	35.87
ATOM	4404	O1P	A V	14	31.164	25.282	30.616	1.00	36.08
ATOM	4405	O2P	A V	14	29.438	24.065	29.169	1.00	33.01
ATOM	4406	O5*	A V	14	31.640	22.953	29.882	1.00	31.71
ATOM	4407	C5*	A V	14	32.775	22.863	30.722	1.00	28.19
ATOM	4408	C4*	A V	14	33.754	21.904	30.108	1.00	30.45
ATOM	4409	O4*	A V	14	33.244	20.557	30.255	1.00	33.71
ATOM	4410	C3*	A V	14	33.925	22.116	28.601	1.00	30.53
ATOM	4411	O3*	A V	14	35.257	21.730	28.285	1.00	32.67
ATOM	4412	C2*	A V	14	32.961	21.105	27.998	1.00	23.63
ATOM	4413	C1*	A V	14	33.149	19.953	28.972	1.00	29.19
ATOM	4414	N9	A V	14	32.105	18.918	29.025	1.00	28.62
ATOM	4415	C8	A V	14	30.754	19.050	28.810	1.00	21.03
ATOM	4416	N7	A V	14	30.104	17.917	28.859	1.00	22.96
ATOM	4417	C5	A V	14	31.080	16.978	29.144	1.00	26.56
ATOM	4418	C6	A V	14	31.027	15.577	29.333	1.00	30.41
ATOM	4419	N6	A V	14	29.906	14.860	29.243	1.00	25.26
ATOM	4420	N1	A V	14	32.184	14.932	29.622	1.00	31.46
ATOM	4421	C2	A V	14	33.306	15.654	29.721	1.00	29.78
ATOM	4422	N3	A V	14	33.476	16.972	29.569	1.00	31.83
ATOM	4423	C4	A V	14	32.313	17.581	29.273	1.00	25.13
ATOM	4424	P	G V	15	36.157	22.646	27.352	1.00	28.77
ATOM	4425	O1P	G V	15	36.849	23.636	28.187	1.00	30.07
ATOM	4426	O2P	G V	15	35.316	23.067	26.275	1.00	21.25
ATOM	4427	O5*	G V	15	37.219	21.598	26.842	1.00	24.47
ATOM	4428	C5*	G V	15	36.822	20.604	25.933	1.00	26.86
ATOM	4429	C4*	G V	15	37.326	19.260	26.386	1.00	26.68
ATOM	4430	O4*	G V	15	36.283	18.597	27.142	1.00	24.69
ATOM	4431	C3*	G V	15	37.588	18.389	25.173	1.00	26.35
ATOM	4432	O3*	G V	15	38.944	18.091	25.004	1.00	27.22
ATOM	4433	C2*	G V	15	36.792	17.122	25.375	1.00	26.66
ATOM	4434	C1*	G V	15	36.117	17.244	26.717	1.00	24.43
ATOM	4435	N9	G V	15	34.702	17.033	26.437	1.00	28.46
ATOM	4436	C8	G V	15	33.781	18.014	26.161	1.00	24.54
ATOM	4437	N7	G V	15	32.600	17.536	25.880	1.00	29.00
ATOM	4438	C5	G V	15	32.738	16.162	26.002	1.00	26.79
ATOM	4439	C6	G V	15	31.799	15.149	25.841	1.00	24.65
ATOM	4440	O6	G V	15	30.637	15.254	25.571	1.00	30.12
ATOM	4441	N1	G V	15	32.345	13.900	26.032	1.00	21.79
ATOM	4442	C2	G V	15	33.644	13.652	26.331	1.00	24.11
ATOM	4443	N2	G V	15	33.985	12.370	26.425	1.00	24.86
ATOM	4444	N3	G V	15	34.544	14.603	26.508	1.00	27.80
ATOM	4445	C4	G V	15	34.026	15.827	26.334	1.00	28.46
ATOM	4446	P	T V	16	39.488	17.819	23.521	1.00	31.63
ATOM	4447	O1P	T V	16	40.940	18.041	23.539	1.00	36.54
ATOM	4448	O2P	T V	16	38.655	18.462	22.494	1.00	28.62
ATOM	4449	O5*	T V	16	39.246	16.270	23.323	1.00	27.33
ATOM	4450	C5*	T V	16	39.741	15.366	24.289	1.00	27.71
ATOM	4451	C4*	T V	16	39.326	13.962	23.936	1.00	31.59
ATOM	4452	O4*	T V	16	37.912	13.770	24.150	1.00	29.36
ATOM	4453	C3*	T V	16	39.595	13.573	22.488	1.00	31.76
ATOM	4454	O3*	T V	16	40.213	12.288	22.494	1.00	28.22
ATOM	4455	C2*	T V	16	38.215	13.561	21.849	1.00	28.50
ATOM	4456	C1*	T V	16	37.294	13.222	23.018	1.00	33.29
ATOM	4457	N1	T V	16	35.926	13.795	22.948	1.00	37.84
ATOM	4458	C2	T V	16	34.842	12.953	23.118	1.00	36.22
ATOM	4459	O2	T V	16	34.941	11.764	23.337	1.00	40.30
ATOM	4460	N3	T V	16	33.624	13.566	23.027	1.00	37.03
ATOM	4461	C4	T V	16	33.372	14.889	22.781	1.00	35.18
ATOM	4462	O4	T V	16	32.224	15.274	22.704	1.00	31.59

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ATOM	4463	C5	T V	16	34.545	15.718	22.626	1.00	35.22
ATOM	4464	C5M	T V	16	34.363	17.178	22.373	1.00	29.11
ATOM	4465	C6	T V	16	35.749	15.138	22.714	1.00	28.39
ATOM	4466	P	C V	17	40.955	11.784	21.196	1.00	33.04
ATOM	4467	O1P	C V	17	42.042	10.903	21.655	1.00	28.92
ATOM	4468	O2P	C V	17	41.269	12.945	20.337	1.00	22.40
ATOM	4469	O5*	C V	17	39.840	10.899	20.514	1.00	31.50
ATOM	4470	C5*	C V	17	39.218	9.872	21.257	1.00	31.43
ATOM	4471	C4*	C V	17	38.016	9.363	20.509	1.00	33.84
ATOM	4472	O4*	C V	17	36.916	10.290	20.653	1.00	32.44
ATOM	4473	C3*	C V	17	38.228	9.172	18.998	1.00	36.00
ATOM	4474	O3*	C V	17	37.775	7.881	18.626	1.00	40.63
ATOM	4475	C2*	C V	17	37.321	10.210	18.366	1.00	35.73
ATOM	4476	C1*	C V	17	36.235	10.347	19.412	1.00	35.37
ATOM	4477	N1	C V	17	35.443	11.591	19.353	1.00	36.36
ATOM	4478	C2	C V	17	34.063	11.496	19.455	1.00	38.81
ATOM	4479	O2	C V	17	33.565	10.396	19.575	1.00	44.42
ATOM	4480	N3	C V	17	33.301	12.612	19.417	1.00	37.14
ATOM	4481	C4	C V	17	33.878	13.801	19.294	1.00	32.85
ATOM	4482	N4	C V	17	33.082	14.864	19.294	1.00	27.26
ATOM	4483	C5	C V	17	35.296	13.942	19.171	1.00	34.39
ATOM	4484	C6	C V	17	36.036	12.816	19.207	1.00	38.74
ATOM	4485	P	T V	18	37.731	7.449	17.082	1.00	44.99
ATOM	4486	O1P	T V	18	38.430	6.155	17.106	1.00	48.83
ATOM	4487	O2P	T V	18	38.172	8.487	16.164	1.00	42.13
ATOM	4488	O5*	T V	18	36.183	7.189	16.850	1.00	39.84
ATOM	4489	C5*	T V	18	35.452	6.482	17.825	1.00	37.57
ATOM	4490	C4*	T V	18	34.018	6.380	17.395	1.00	40.04
ATOM	4491	O4*	T V	18	33.436	7.693	17.405	1.00	40.42
ATOM	4492	C3*	T V	18	33.825	5.866	15.977	1.00	39.97
ATOM	4493	O3*	T V	18	32.643	5.085	16.000	1.00	42.14
ATOM	4494	C2*	T V	18	33.641	7.134	15.162	1.00	38.92
ATOM	4495	C1*	T V	18	32.885	7.995	16.148	1.00	39.48
ATOM	4496	N1	T V	18	32.962	9.446	15.994	1.00	39.09
ATOM	4497	C2	T V	18	31.778	10.126	16.029	1.00	40.99
ATOM	4498	O2	T V	18	30.708	9.569	16.064	1.00	46.54
ATOM	4499	N3	T V	18	31.890	11.482	16.000	1.00	36.09
ATOM	4500	C4	T V	18	33.046	12.210	15.907	1.00	39.60
ATOM	4501	O4	T V	18	32.987	13.424	15.888	1.00	37.92
ATOM	4502	C5	T V	18	34.262	11.432	15.830	1.00	37.67
ATOM	4503	C5M	T V	18	35.568	12.145	15.706	1.00	31.82
ATOM	4504	C6	T V	18	34.161	10.100	15.873	1.00	36.34
ATOM	4505	P	T V	19	32.260	4.202	14.734	1.00	48.03
ATOM	4506	O1P	T V	19	31.811	2.873	15.258	1.00	46.64
ATOM	4507	O2P	T V	19	33.332	4.283	13.718	1.00	42.78
ATOM	4508	O5*	T V	19	30.990	4.942	14.172	1.00	43.70
ATOM	4509	C5*	T V	19	29.894	5.158	15.019	1.00	39.80
ATOM	4510	C4*	T V	19	28.866	5.995	14.308	1.00	38.11
ATOM	4511	O4*	T V	19	29.277	7.380	14.259	1.00	35.86
ATOM	4512	C3*	T V	19	28.585	5.574	12.873	1.00	39.02
ATOM	4513	O3*	T V	19	27.172	5.451	12.785	1.00	45.63
ATOM	4514	C2*	T V	19	29.116	6.741	12.038	1.00	37.62
ATOM	4515	C1*	T V	19	28.980	7.918	12.993	1.00	35.70
ATOM	4516	N1	T V	19	29.871	9.078	12.787	1.00	35.51
ATOM	4517	C2	T V	19	29.309	10.332	12.876	1.00	37.19
ATOM	4518	O2	T V	19	28.129	10.527	13.068	1.00	33.13
ATOM	4519	N3	T V	19	30.185	11.364	12.717	1.00	34.56
ATOM	4520	C4	T V	19	31.527	11.286	12.476	1.00	36.16
ATOM	4521	O4	T V	19	32.166	12.303	12.364	1.00	35.52
ATOM	4522	C5	T V	19	32.061	9.951	12.374	1.00	35.94
ATOM	4523	C5M	T V	19	33.517	9.774	12.092	1.00	36.06
ATOM	4524	C6	T V	19	31.218	8.922	12.538	1.00	35.36
ATOM	4525	P	T V	20	26.477	5.110	11.389	1.00	47.94

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ATOM	4526	O1P	T V	20	25.351	4.213	11.739	1.00	47.43
ATOM	4527	O2P	T V	20	27.533	4.667	10.432	1.00	46.52
ATOM	4528	O5*	T V	20	25.852	6.491	10.977	1.00	42.31
ATOM	4529	C5*	T V	20	25.051	7.168	11.911	1.00	37.49
ATOM	4530	C4*	T V	20	24.667	8.512	11.358	1.00	45.17
ATOM	4531	O4*	T V	20	25.826	9.384	11.317	1.00	44.88
ATOM	4532	C3*	T V	20	24.116	8.467	9.934	1.00	47.81
ATOM	4533	O3*	T V	20	22.916	9.228	9.925	1.00	52.78
ATOM	4534	C2*	T V	20	25.206	9.122	9.091	1.00	47.73
ATOM	4535	C1*	T V	20	25.855	10.068	10.085	1.00	43.13
ATOM	4536	N1	T V	20	27.253	10.462	9.827	1.00	41.95
ATOM	4537	C2	T V	20	27.527	11.824	9.819	1.00	44.42
ATOM	4538	O2	T V	20	26.672	12.678	9.995	1.00	41.95
ATOM	4539	N3	T V	20	28.849	12.150	9.602	1.00	38.56
ATOM	4540	C4	T V	20	29.900	11.276	9.405	1.00	40.72
ATOM	4541	O4	T V	20	31.035	11.725	9.264	1.00	36.60
ATOM	4542	C5	T V	20	29.536	9.858	9.410	1.00	37.92
ATOM	4543	CSM	T V	20	30.600	8.837	9.196	1.00	37.58
ATOM	4544	C6	T V	20	28.250	9.529	9.612	1.00	37.44
ATOM	4545	P	T V	21	22.018	9.303	8.614	1.00	54.71
ATOM	4546	O1P	T V	21	20.635	9.212	9.161	1.00	54.53
ATOM	4547	O2P	T V	21	22.497	8.341	7.594	1.00	54.02
ATOM	4548	O5*	T V	21	22.265	10.792	8.107	1.00	54.10
ATOM	4549	C5*	T V	21	22.024	11.882	9.005	1.00	51.08
ATOM	4550	C4*	T V	21	22.443	13.189	8.383	1.00	49.30
ATOM	4551	O4*	T V	21	23.887	13.254	8.325	1.00	46.68
ATOM	4552	C3*	T V	21	21.929	13.458	6.968	1.00	49.38
ATOM	4553	O3*	T V	21	21.274	14.731	6.936	1.00	51.09
ATOM	4554	C2*	T V	21	23.182	13.428	6.104	1.00	46.15
ATOM	4555	C1*	T V	21	24.286	13.799	7.086	1.00	45.39
ATOM	4556	N1	T V	21	25.613	13.249	6.778	1.00	40.88
ATOM	4557	C2	T V	21	26.681	14.118	6.699	1.00	39.17
ATOM	4558	O2	T V	21	26.577	15.316	6.852	1.00	41.44
ATOM	4559	N3	T V	21	27.870	13.533	6.434	1.00	32.99
ATOM	4560	C4	T V	21	28.115	12.208	6.227	1.00	35.19
ATOM	4561	O4	T V	21	29.248	11.849	5.998	1.00	41.24
ATOM	4562	C5	T V	21	26.948	11.338	6.311	1.00	35.14
ATOM	4563	CSM	T V	21	27.105	9.865	6.088	1.00	34.31
ATOM	4564	C6	T V	21	25.770	11.897	6.582	1.00	33.75
ATOM	4565	P	T V	22	20.474	15.192	5.624	1.00	56.06
ATOM	4566	O1P	T V	22	19.326	15.947	6.152	1.00	54.98
ATOM	4567	O2P	T V	22	20.228	14.060	4.695	1.00	56.69
ATOM	4568	O5*	T V	22	21.529	16.175	4.948	1.00	58.23
ATOM	4569	C5*	T V	22	22.258	17.133	5.768	1.00	59.28
ATOM	4570	C4*	T V	22	23.376	17.784	4.986	1.00	57.66
ATOM	4571	O4*	T V	22	24.612	17.040	5.078	1.00	56.29
ATOM	4572	C3*	T V	22	23.095	17.987	3.497	1.00	58.35
ATOM	4573	O3*	T V	22	23.329	19.302	3.051	1.00	60.54
ATOM	4574	C2*	T V	22	24.157	17.153	2.814	1.00	57.02
ATOM	4575	C1*	T V	22	25.266	17.113	3.833	1.00	55.03
ATOM	4576	N1	T V	22	26.108	15.919	3.675	1.00	54.90
ATOM	4577	C2	T V	22	27.474	16.102	3.688	1.00	54.18
ATOM	4578	O2	T V	22	27.989	17.183	3.905	1.00	55.23
ATOM	4579	N3	T V	22	28.207	14.964	3.440	1.00	50.82
ATOM	4580	C4	T V	22	27.714	13.692	3.206	1.00	50.97
ATOM	4581	O4	T V	22	28.482	12.765	2.988	1.00	50.04
ATOM	4582	C5	T V	22	26.278	13.570	3.238	1.00	53.45
ATOM	4583	CSM	T V	22	25.671	12.230	2.989	1.00	57.47
ATOM	4584	C6	T V	22	25.550	14.670	3.481	1.00	52.08
ATOM	1	C1	HT1 H	1	24.926	9.600	14.093	1.00	35.36
ATOM	2	O1	HT1 H	1	25.286	8.662	14.880	1.00	35.49
ATOM	3	C2	HT1 H	1	25.909	10.000	13.145	1.00	35.16
ATOM	4	C3	HT1 H	1	25.536	11.035	12.289	1.00	34.90

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ATOM	5	C4	HT1	H	1	24.274	11.687	12.313	1.00	34.82
ATOM	6	C5	HT1	H	1	23.274	11.255	13.261	1.00	35.00
ATOM	7	C6	HT1	H	1	23.631	10.218	14.147	1.00	35.35
ATOM	8	C7	HT1	H	1	24.160	12.976	11.790	1.00	34.67
ATOM	9	N1	HT1	H	1	25.160	13.740	11.142	1.00	34.69
ATOM	10	C8	HT1	H	1	24.529	14.982	10.792	1.00	34.38
ATOM	11	C9	HT1	H	1	23.120	15.017	11.219	1.00	34.36
ATOM	12	N2	HT1	H	1	22.965	13.749	11.827	1.00	34.56
ATOM	13	C10	HT1	H	1	22.340	16.159	10.987	1.00	34.41
ATOM	14	C11	HT1	H	1	22.907	17.239	10.346	1.00	34.34
ATOM	15	C12	HT1	H	1	24.288	17.218	9.986	1.00	34.44
ATOM	16	C13	HT1	H	1	25.097	16.024	10.169	1.00	34.37
ATOM	17	C14	HT1	H	1	24.875	18.202	9.291	1.00	34.59
ATOM	18	N3	HT1	H	1	25.989	18.047	8.368	1.00	34.71
ATOM	19	C15	HT1	H	1	26.204	19.274	7.775	1.00	34.71
ATOM	20	C16	HT1	H	1	25.195	20.214	8.334	1.00	34.81
ATOM	21	N4	HT1	H	1	24.423	19.543	9.224	1.00	34.73
ATOM	22	C17	HT1	H	1	25.144	21.505	7.986	1.00	34.81
ATOM	23	C18	HT1	H	1	26.107	21.984	7.032	1.00	34.63
ATOM	24	C19	HT1	H	1	27.058	21.078	6.484	1.00	34.64
ATOM	25	C20	HT1	H	1	27.106	19.689	6.858	1.00	34.62
ATOM	26	N5	HT1	H	1	27.945	21.471	5.573	1.00	34.57
ATOM	27	C21	HT1	H	1	28.041	22.889	5.325	1.00	34.53
ATOM	28	C22	HT1	H	1	29.418	23.106	4.868	1.00	34.76
ATOM	29	N6	HT1	H	1	29.784	22.219	3.787	1.00	34.80
ATOM	30	C23	HT1	H	1	28.930	21.146	3.370	1.00	34.70
ATOM	31	C24	HT1	H	1	28.132	20.627	4.393	1.00	34.76
ATOM	32	C25	HT1	H	1	29.984	23.047	2.729	1.00	34.80
ATOM	33	C26	HT1	H	1	26.620	8.215	15.290	1.00	35.55
ATOM	34	C27	HT1	H	1	26.461	7.045	16.247	1.00	35.41
ATOM	1	C1	HT1	H	2	36.379	22.017	67.215	1.00	35.36
ATOM	2	O1	HT1	H	2	35.898	22.638	68.216	1.00	35.49
ATOM	3	C2	HT1	H	2	35.414	21.392	66.400	1.00	35.16
ATOM	4	C3	HT1	H	2	35.926	20.698	65.311	1.00	34.90
ATOM	5	C4	HT1	H	2	37.306	20.586	64.985	1.00	34.82
ATOM	6	C5	HT1	H	2	38.275	21.247	65.803	1.00	35.00
ATOM	7	C6	HT1	H	2	37.784	21.945	66.918	1.00	35.35
ATOM	8	C7	HT1	H	2	37.752	19.516	64.215	1.00	34.67
ATOM	9	N1	HT1	H	2	36.973	18.513	63.623	1.00	34.69
ATOM	10	C8	HT1	H	2	37.909	17.664	62.937	1.00	34.38
ATOM	11	C9	HT1	H	2	39.294	18.121	63.090	1.00	34.36
ATOM	12	N2	HT1	H	2	39.119	19.265	63.891	1.00	34.56
ATOM	13	C10	HT1	H	2	40.357	17.407	62.510	1.00	34.41
ATOM	14	C11	HT1	H	2	40.084	16.281	61.788	1.00	34.34
ATOM	15	C12	HT1	H	2	38.745	15.813	61.690	1.00	34.44
ATOM	16	C13	HT1	H	2	37.626	16.570	62.239	1.00	34.37
ATOM	17	C14	HT1	H	2	38.407	14.773	60.937	1.00	34.59
ATOM	18	N3	HT1	H	2	37.130	14.603	60.276	1.00	34.71
ATOM	19	C15	HT1	H	2	37.240	13.471	59.509	1.00	34.71
ATOM	20	C16	HT1	H	2	38.620	12.929	59.688	1.00	34.81
ATOM	21	N4	HT1	H	2	39.283	13.729	60.537	1.00	34.73
ATOM	22	C17	HT1	H	2	39.050	11.812	59.098	1.00	34.81
ATOM	23	C18	HT1	H	2	38.131	11.123	58.259	1.00	34.63
ATOM	24	C19	HT1	H	2	36.818	11.654	58.073	1.00	34.64
ATOM	25	C20	HT1	H	2	36.361	12.860	58.707	1.00	34.62
ATOM	26	N5	HT1	H	2	35.946	11.068	57.278	1.00	34.57
ATOM	27	C21	HT1	H	2	36.312	9.764	56.786	1.00	34.53
ATOM	28	C22	HT1	H	2	35.039	9.092	56.549	1.00	34.76
ATOM	29	N6	HT1	H	2	34.138	9.900	55.742	1.00	34.80
ATOM	30	C23	HT1	H	2	34.428	11.265	55.392	1.00	34.70
ATOM	31	C24	HT1	H	2	35.199	11.918	56.336	1.00	34.76
ATOM	32	C25	HT1	H	2	34.010	9.199	54.600	1.00	34.80
ATOM	33	C26	HT1	H	2	34.626	22.480	68.934	1.00	35.55

423/435

ATOM  
END

34 C27 HT1 H 2

34.571 23.491 70.050 1.00 35.41,

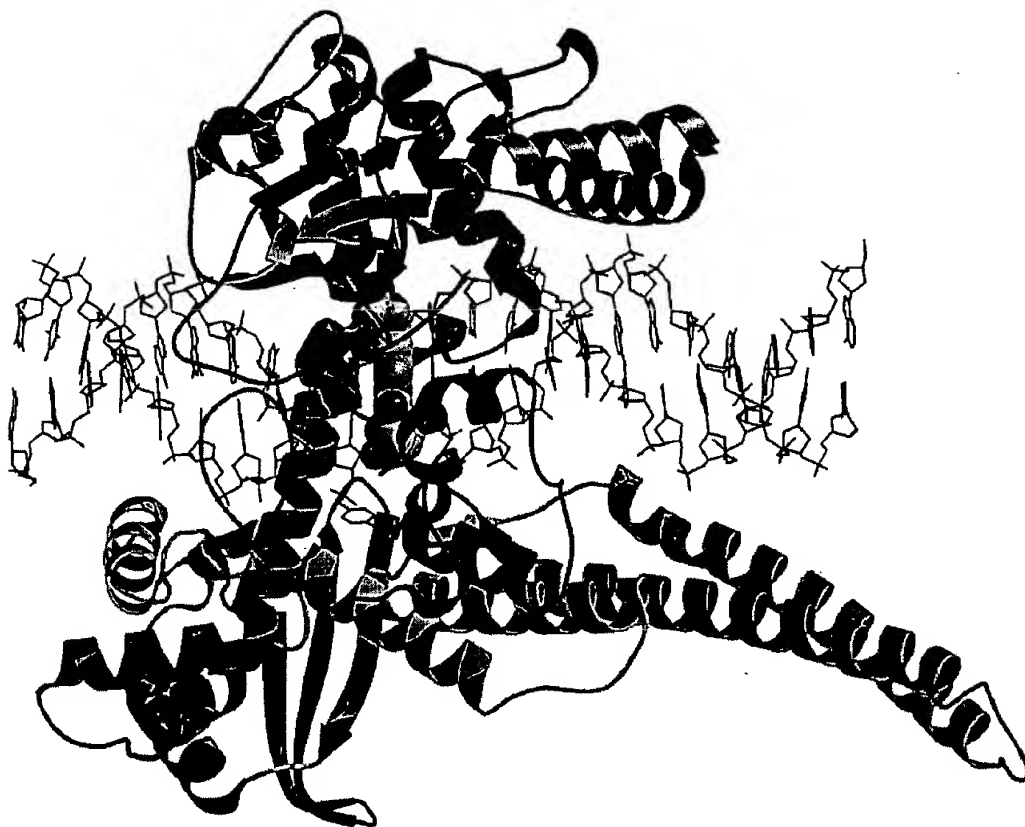
FIGURE 6



FIGURE 6  
CRYSTAL FORM 7.

0993245-11401  
FOUFTT" 512E6660

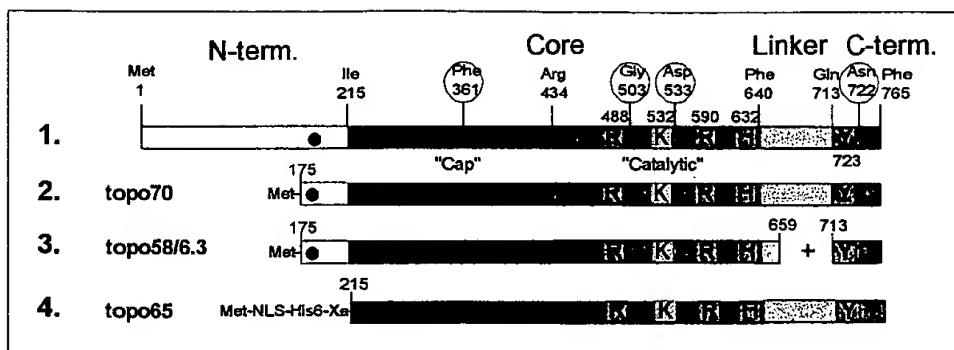
FIGURE 7



CRYSTAL FORM 9 with Topotecan shown in space filling format.

0999345.11401  
FOHFF"542E6660

# FIGURE 8

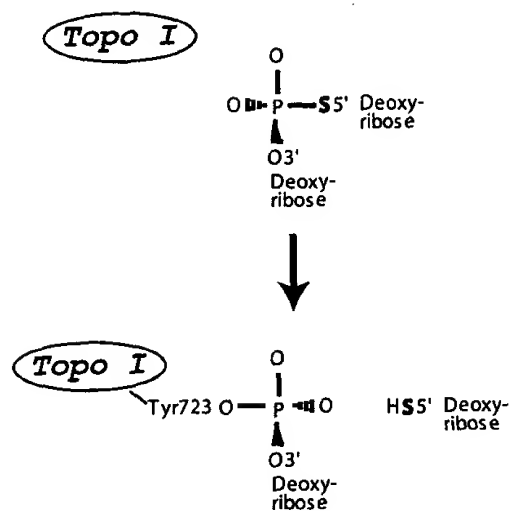


**The domain organization of human topo I.** A schematic representation of the domain organization for full-length human topo I is shown (line 1). Other human topo I constructs include the N-terminally truncated topo70 (line 2), reconstituted topo58/6.3 (line 3), and N-terminally truncated topo65 (line 4). Circles indicate residues that can be mutated to confer resistance to CPT. The color scheme is described in the text and in Fig 2.



# FIGURE 9

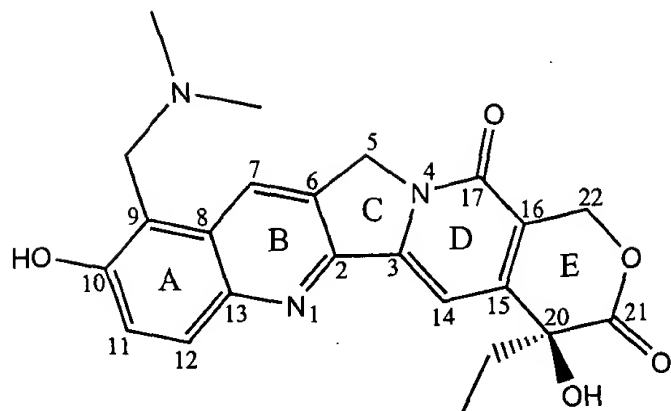
Cleavage by topo I at a 5'-bridging phosphorothiolate.



22-mer Suicide Substrate containing a 5'-bridging phosphorothiolate (OPS) at the site of topo I cleavage.

5'-Bridging Phosphorothiolate	Topo I Cleavage Site O-P-S	Oligo Names
5' AAAAAGACTTGGAAAAATTTTT 3'	↓	CL22-sG
3' TTTTCTGAACCTTTTAAAAA 5'		CP22 -C
Alternative base pairs at the +1 position downstream of cleavage site.	C G	CL22-sC CP22 -G
	A T	CL22-sA CP22 -T
	T A	CL22-sT CP22 -A

FIGURE 10



09093245-111401  
FOI T T " 542E6550

FIGURE 11

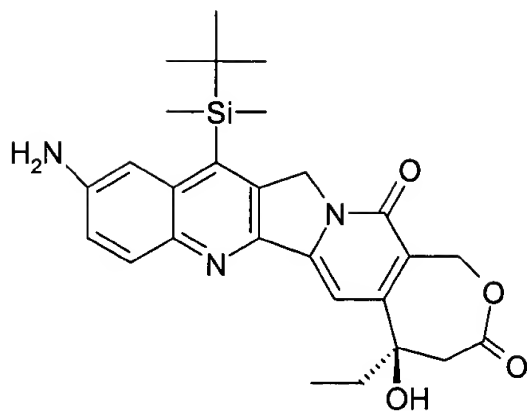


Figure 11  
AG260

**FIGURE 12**

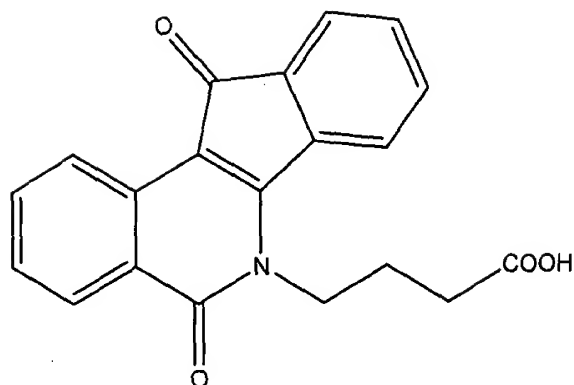
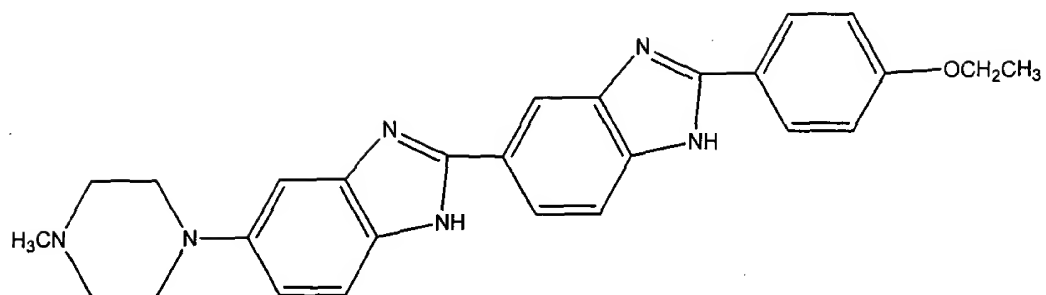


Figure 12. MJ-II-38

TOP SECRET S426660

**FIGURE 13**

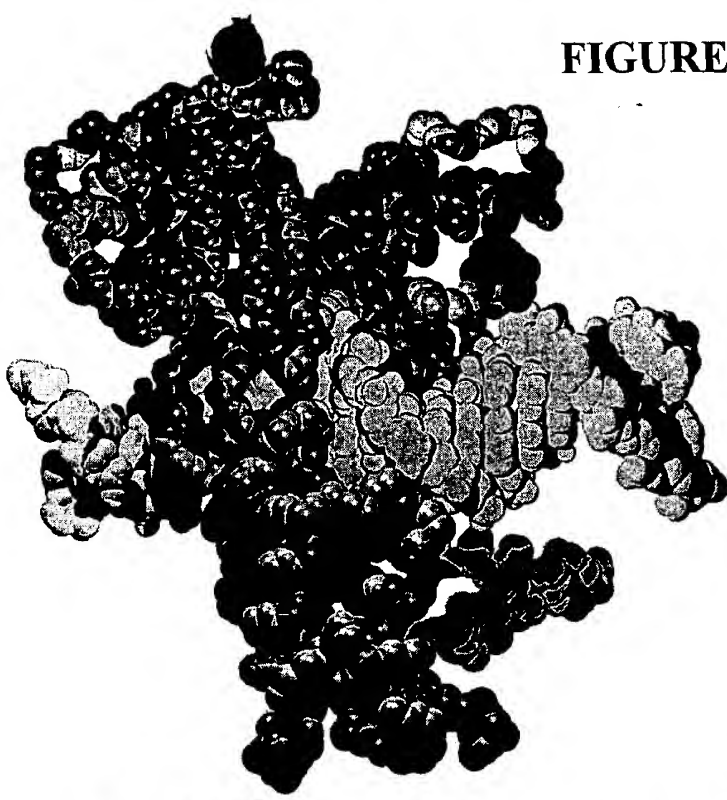


Hoechst-33342

HOECHST 33342

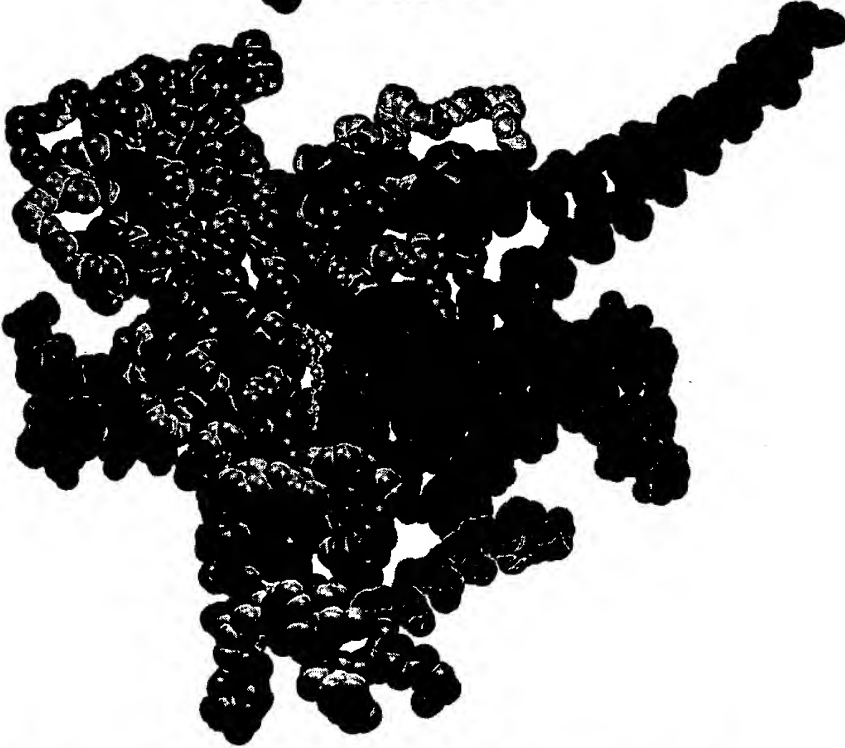
# FIGURE

a



0993245-11401

b



c



FIGURE 15

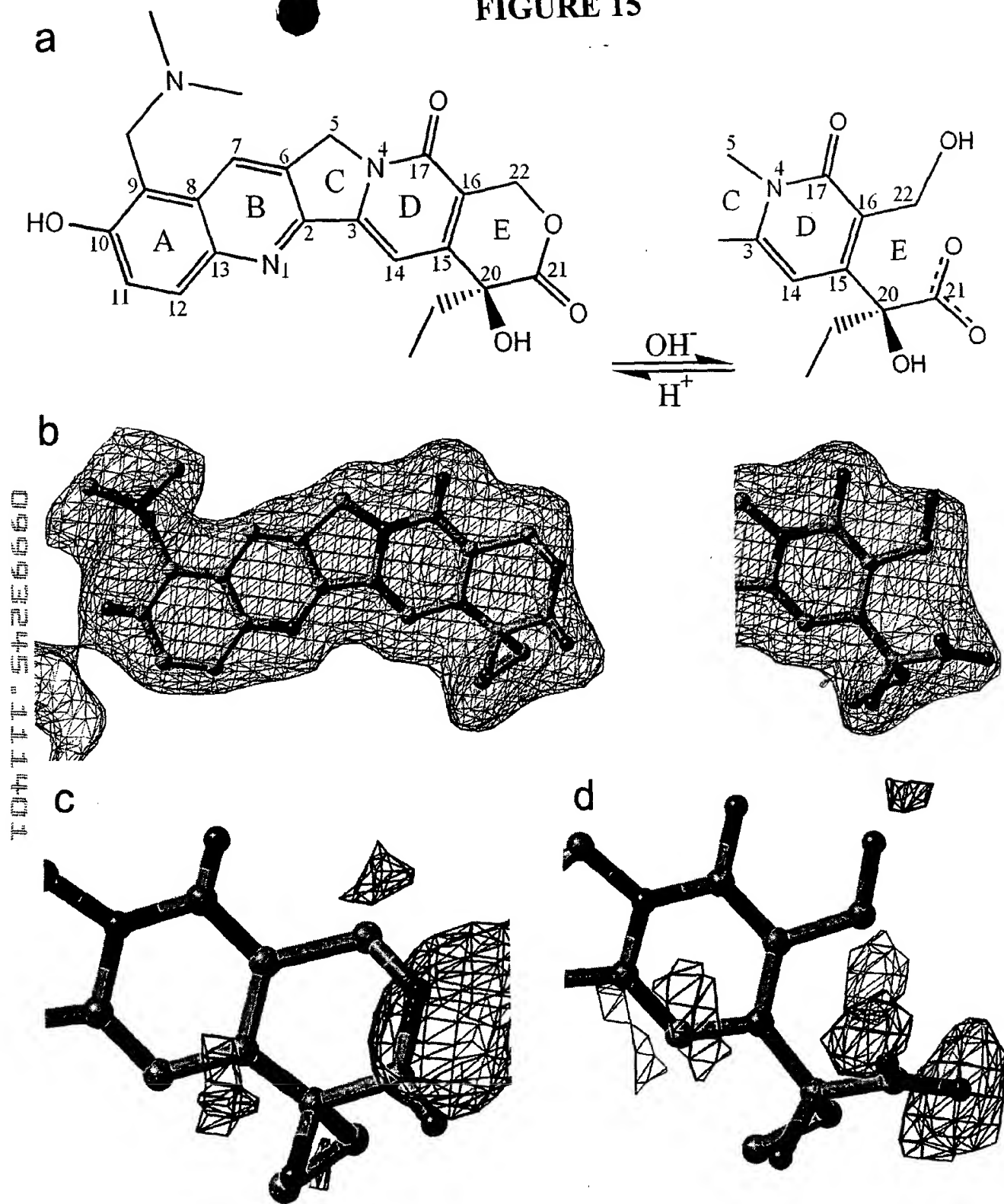
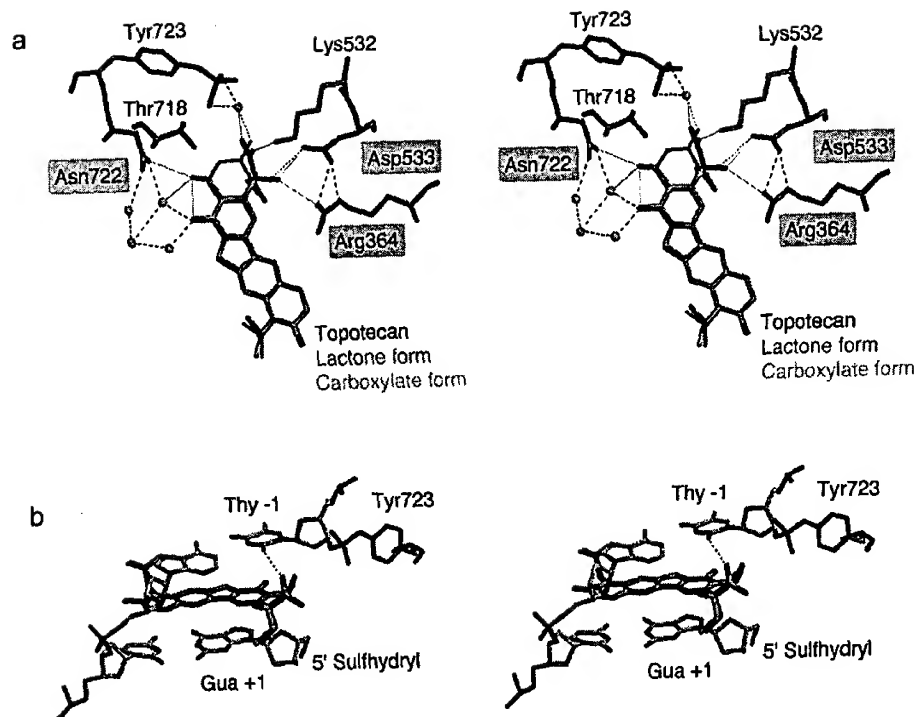


FIGURE 16



TOPOTECAN 5426660



FIGURE 17

